2007-09 HVAC

Climate Control - MDX

COMPONENT LOCATION INDEX

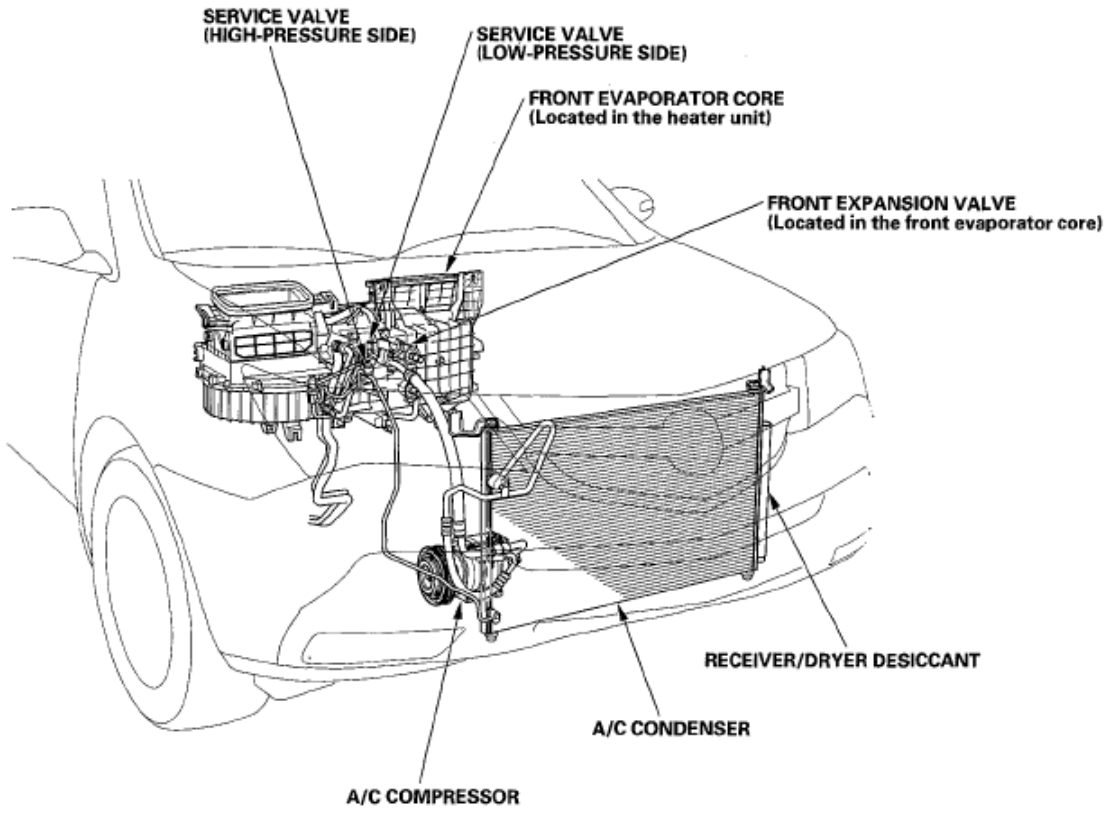


Fig. 1: Identifying Climate Control Component Location (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

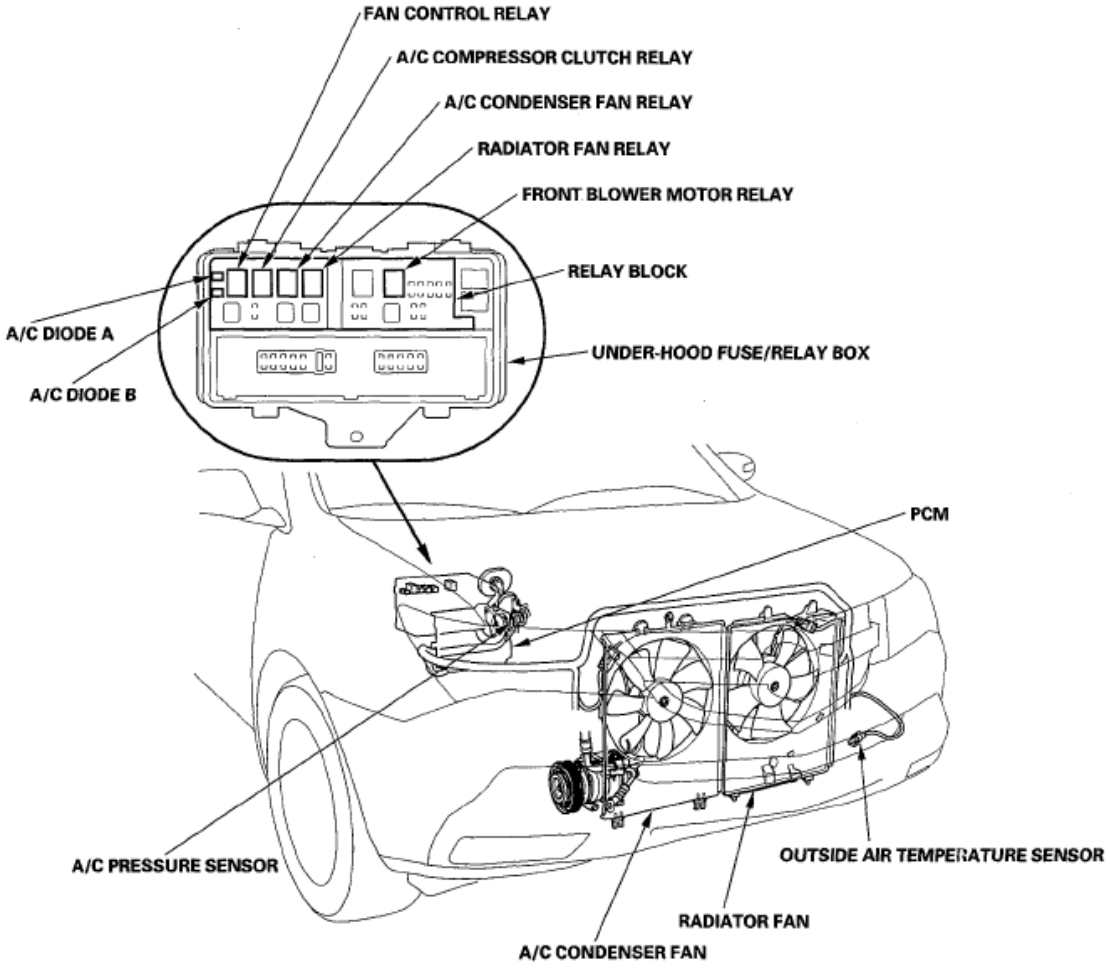


Fig. 2: Identifying Climate Control Component Location (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

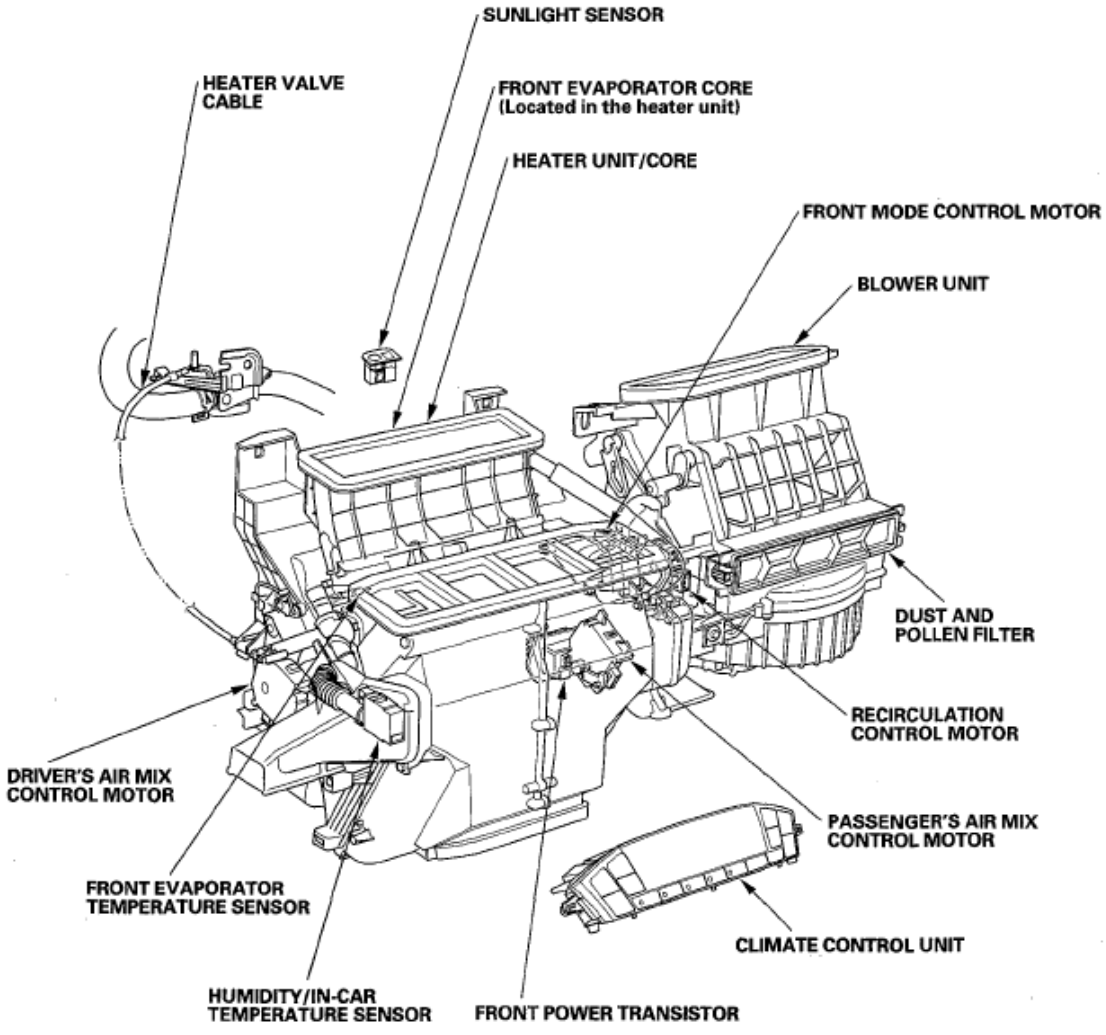


Fig. 3: Identifying Climate Control Component Location (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C SERVICE TIPS AND PRECAUTIONS

WARNING:

- **Compressed air mixed with the R-134a forms a combustible vapor.**
- **The vapor can burn or explode causing serious injury.**
- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

The air conditioning system uses HFC-134a (R-134a) refrigerant and polyalkyleneglycol (PAG) refrigerant oil, which are not compatible with CFC-12 (R-12) refrigerant and mineral oil. Do not use R-12 refrigerant or mineral oil in this system, and do not attempt to use R-12 servicing equipment; damage to the air conditioning system or your servicing equipment will result. Use only service equipment that is U.L-listed and is certified to meet the requirements of SAE J2210 to remove R-134a from the air conditioning system.

If accidental system discharge occurs, ventilate the work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

- Always disconnect the negative cable from the battery whenever replacing air conditioning parts.
- Keep moisture and dirt out of the system. When disconnecting any lines, plug or cap the fittings immediately; don't remove the caps or plugs until just before you reconnect each line.
- Before connecting any hose or line, apply a few drops of refrigerant oil to the O-ring.
- When tightening or loosening a fitting, use a second wrench to support the matching fitting.
- When discharging the system, use an R-134a refrigerant recovery/recycling/charging station; don't release refrigerant into the atmosphere.

A/C REFRIGERANT OIL REPLACEMENT

Recommended PAG oil: DENSO ND-OIL 8

- P/N 38897-PR7-A01AH: 120 mL (4 fl.oz)
- P/N 38899-PR7-A01: 40 mL (1 1/3 fl.oz)

Add the recommended refrigerant oil in the amount listed if you replace any of the following parts.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

A/C condenser (including Dryer Desiccant)	50 mL (1 2/3 fl.oz)
Front Evaporator	40 mL (1 1/3 fl.oz)
Rear Evaporator	30 mL (1 fl.oz)
Line or hose	10 mL (1/3 fl.oz)
Receiver/Dryer Desiccant	10 mL (1/3 fl.oz)
Leakage repair	25 mL (5/7 fl.oz)
A/C compressor	For A/C compressor replacement, subtract the volume of oil drained from the removed A/C

	compressor from 125 mL (4 2/9 fl.oz), and drain the calculated volumne of oil from the new A/C compressor: 135 mL (4 2/9 fl.oz) - Volume of removed A/C compressor = Volume to drain from new A/C commpressor.

NOTE: Even if no oil is drained from the removed A/C compressor, don't drain more than 50 mL (1 2/3 fl.oz) from the new A/C compressor.

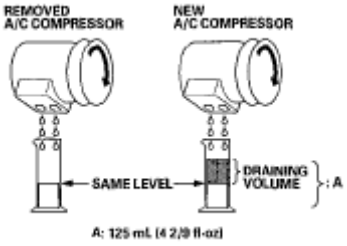
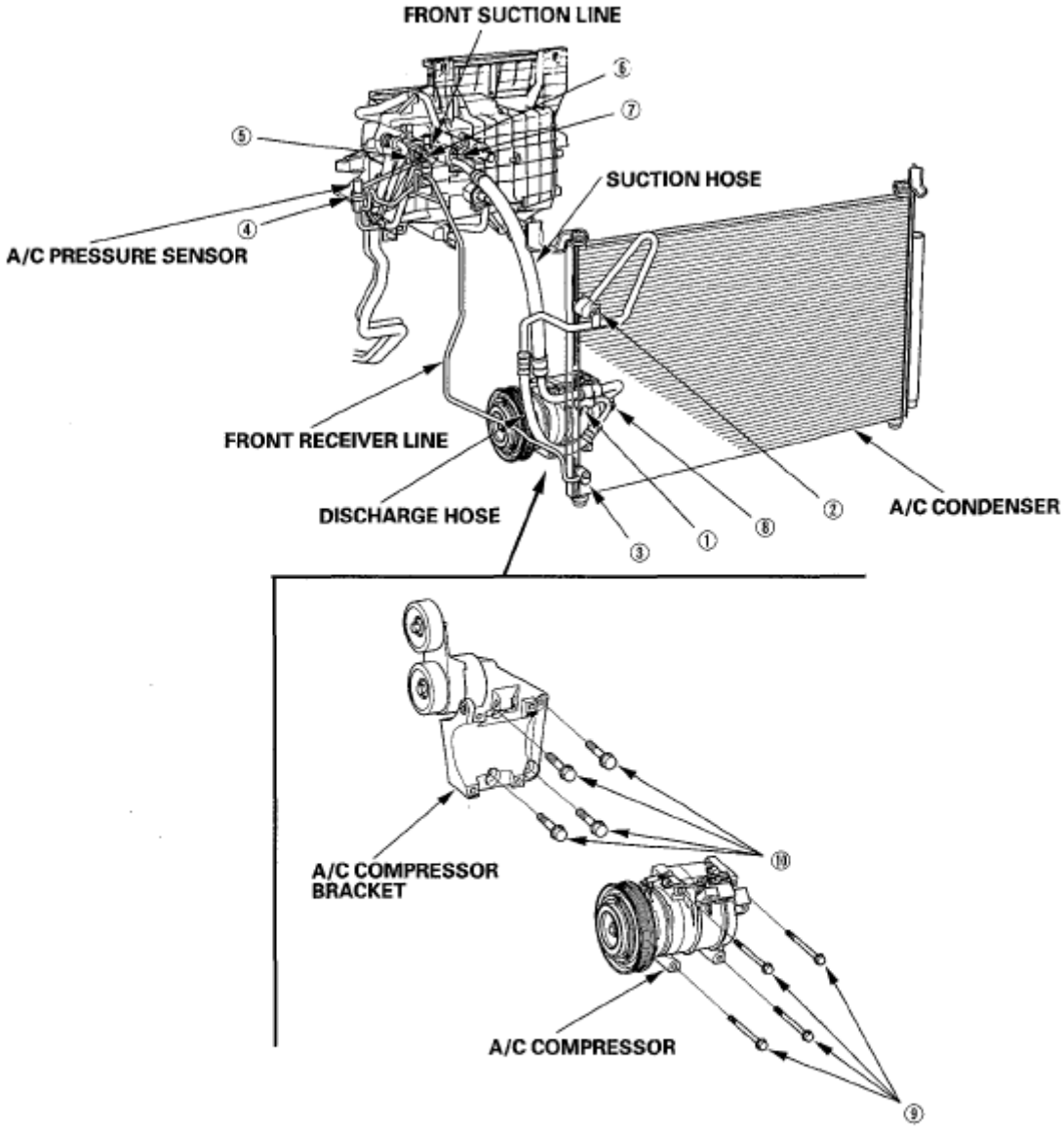


Fig. 4: Identifying Refrigerant Oil Level
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT A/C LINE REPLACEMENT



① Discharge hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
② Discharge hose to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
③ Front receiver line to the A/C condenser (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
④ A/C pressure sensor to the front receiver line (11 x 1.0 mm): 10.8 N·m (1.1 kgf·m, 8.0 lbf·ft)
⑤ Front receiver line to the front evaporator (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑥ Front suction line to the front evaporator (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑦ Front suction line to the suction hose (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑧ Suction hose to the A/C compressor (6 x 1.0 mm): 9.8 N·m (1.0 kgf·m, 7.2 lbf·ft)
⑨ A/C compressor to the A/C compressor bracket (8 x 1.25 mm): 22 N·m (2.2 kgf·m, 16.2 lbf·ft)
⑩ A/C compressor to the engine block (10 x 1.25 mm): 45 N·m (4.6 kgf·m, 33.2 lbf·ft)

Fig. 5: Identifying Front A/C Line
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C SYSTEM INSPECTION

Before troubleshooting any problem with the air conditioning system, do the following:

1. With the ignition switch in the LOCK (0), inspect the A/C components, pressure lines and hoses for stains that may indicate a refrigerant or a compressor oil leak.

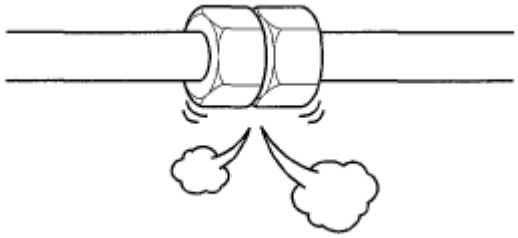


Fig. 6: Identifying Compressor Oil Leak
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Check the condenser for material clogging the fins or for damage to the fins:
   - Carefully clean any material from the condenser fins with water and detergent.
   - Be sure to dry the condenser completely.

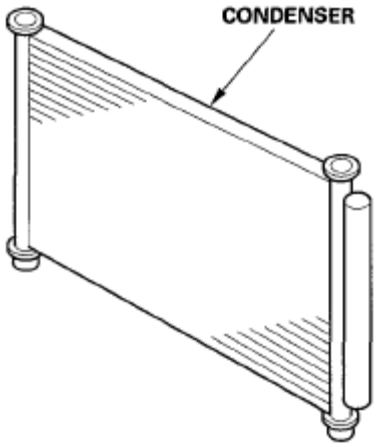


Fig. 7: Identifying Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the drive belt (see **DRIVE BELT INSPECTION**).
4. Make sure no material is blocking the airflow to the condenser.
5. Check the dust and pollen filter, and replace it if it is clogged (see **DUST AND POLLEN FILTER REPLACEMENT**).
6. Check the operation of the heater valve. Make sure the cable is adjusted properly (see **HEATER VALVE CABLE ADJUSTMENT**).
7. Start the engine, turn the air conditioning system on, and allow it to normalize for a few minutes.
8. Check that the A/C operates at each position of the blower fan switch (except OFF).
9. Check that the compressor clutch is engaged. The pressure plate should be rotating at the same speed as the pulley.

10. Check that the cooling fans operate when the compressor clutch is engaged.
11. Check that the engine idle speed is correctly maintained when the A/C is switched on and off when the compressor clutch is engaged and disengaged.

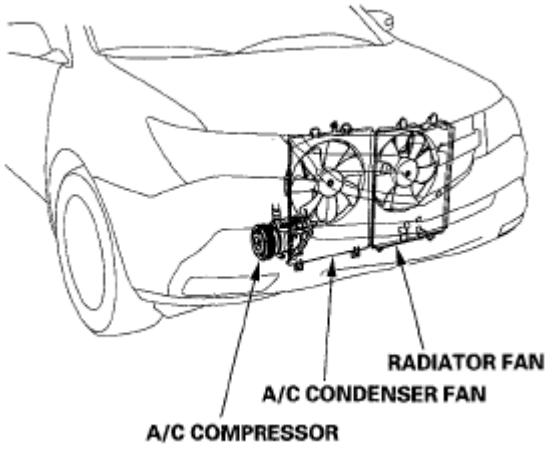


Fig. 8: Identifying Radiator Fan, A/C Condenser Fan And A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO CHECK FOR DTCS WITH THE HDS

1. Make sure the ignition switch is LOCK (0).
2. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

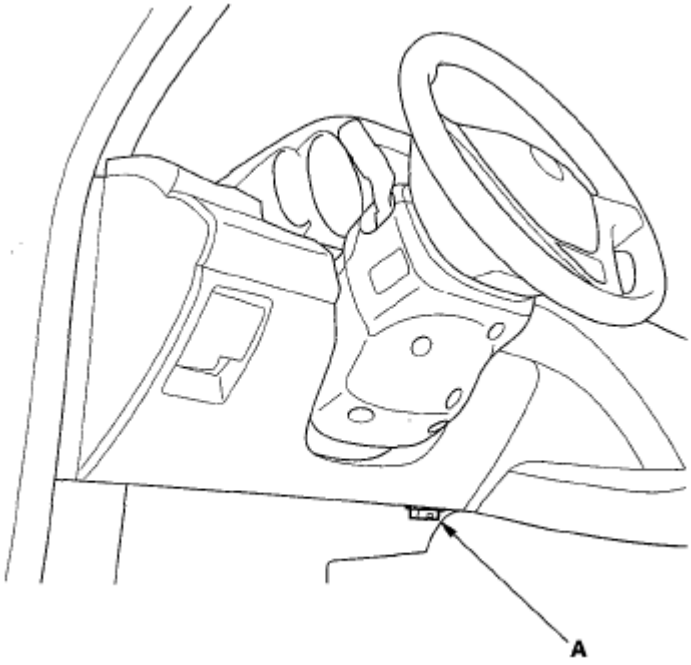


Fig. 9: Connecting HDS To DLC
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch to ON (II).
4. Make sure the HDS communicates with the vehicle and the climate control unit. If it doesn't, troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING**).
5. Select HVAC/CLIMATE CONTROL in the BODY ELECTRICAL menu.
6. Select DTCs in the HVAC/CLIMATE CONTROL menu.
7. Check for DTCs. If any DTCs are indicated, write down the DTCs, then go to the indicated DTC troubleshooting. If no DTCs are indicated, refer to symptom troubleshooting.

NOTE:

- **After troubleshooting, clear the DTCs with the HDS.**
- **For specific operations, refer to the user's manual that came with the HDS.**

HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS

1. Make sure the ignition switch is LOCK (0).
2. Connect the HDS to the data link connector (DLC).
3. Turn the ignition switch to ON (II).
4. Make sure the HDS communicates with the vehicle and the climate control unit. If it doesn't, troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING**).
5. Select HVAC/CLIMATE CONTROL in the BODY ELECTRICAL menu.
6. Select INSPECTION in the HVAC/CLIMATE CONTROL menu.

7. Select CLIMATE CONTROL SELF TEST in the INSPECTION menu.
8. Check for DTCs. If any DTCs are indicated, write down the DTCs, then go to the indicated DTC troubleshooting.

NOTE:

- **After troubleshooting, clear the DTCs with the HDS.**
- **For specific operations, refer to the user's manual that came with the HDS.**

HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS

The climate control unit has a self-diagnostic function. To run the self-diagnostic function, do the following:

1. Turn the ignition switch to LOCK (0), and then ON (II).
2. Press and hold the OFF button, then press the RECIRCULATION CONTROL button five times within 10 seconds. Release the OFF and RECIRCULATION CONTROL buttons; then the self-diagnostic begins.

NOTE:

- **The blower motor will run at various speeds regardless of what the panel is displaying.**
- **If there is any problem in the system, the system flashes "88 AUTO WINDSHIELD DEFROST" or alternately flashes "88 AUTO WINDSHIELD DEFROST" and one or more of the 14 segments (A through P). Refer to CHECKING FOR DTCS.**
- **If there are no problems detected, the segments will not illuminate, and the system will appear to be turned off.**

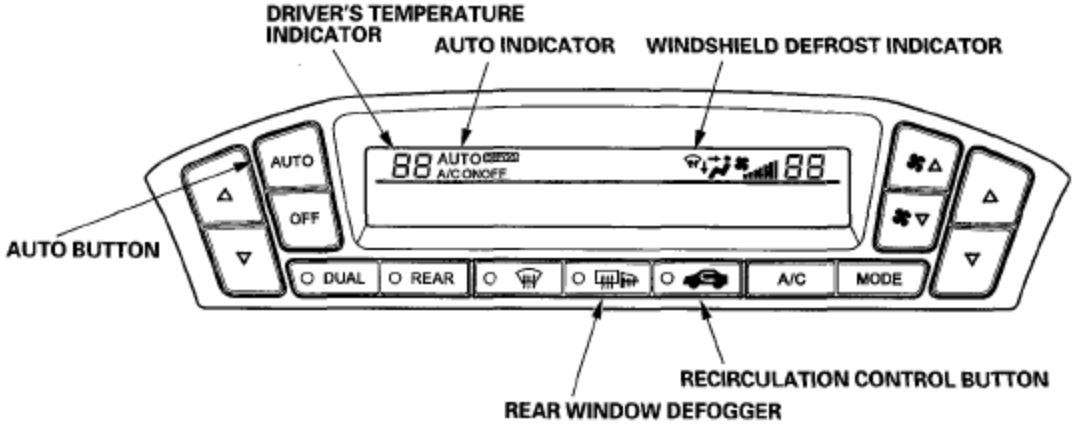


Fig. 10: Identifying Auto Button, Driver Temperature Indicator And Rear Window Defogger
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Canceling the Self-diagnostic Function

3. Turn the ignition switch to LOCK (0), to cancel the self-diagnostic function. After completing the repair work, run the self-diagnostic function again to make sure that there are no other DTCs.

CHECKING FOR DTCS

The temperature display indicates single or multiple DTCs. If indicator segments A, B, C, E, G, J, M, N, AUTO, and WINDSHIELD DEFROST are on at the same time, there may be an open in the common ground wire. If no DTCs are present, the indicator remains blank.

Fig. 11: Identifying A/C Control Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC (DRIVER'S TEMPERATURE INDICATOR SEGMENT, AUTO, AND WINDSHIELD DEFROST INDICATOR) CHART

DTC (Driver's Temperature Indicator Segment, AUTO, and WINDSHIELD DEFROST Indicator)	Detection Item
A and AUTO	An open in the in-car temperature sensor circuit (see **DTC B1225 or DTC indicator A and AUTO: An Open in the In-car Temperature Sensor Circuit**)
B and AUTO	A short in the in-car temperature sensor circuit (see **DTC B1226 or DTC indicator B and AUTO: A Short in the In-car Temperature Sensor Circuit**)
C and AUTO	An open in the outside air temperature sensor circuit (see **DTC B1227 or DTC indicator C and AUTO: An Open in the Outside Air Temperature Sensor Circuit**)
D and AUTO	A short in the outside air temperature sensor circuit (see **DTC B1228 or DTC indicator D and AUTO: A Short in the Outside Air Temperature Sensor Circuit**)
E and AUTO	An open in the sunlight sensor circuit (see **DTC B1229 or DTC indicator E and AUTO: An Open in the Sunlight Sensor Circuit**)
F and AUTO	A short in the sunlight sensor circuit (see **DTC B1230 or DTC indicator F and AUTO: A Short in the Sunlight Sensor Circuit**)

G and AUTO	An open in the front evaporator temperature sensor circuit (see **DTC B1231 or DTC indicator G and AUTO: An Open in the Front Evaporator Temperature Sensor Circuit**)
Hand AUTO	A short in the front evaporator temperature sensor circuit (see **DTC B1232 or DTC indicator H and AUTO: A Short in the Front Evaporator Temperature Sensor Circuit**)
J and AUTO	An open in the driver's air mix control motor circuit (see **DTC B1233 or DTC indicator J and AUTO: An Open in the Driver's Air Mix Control Motor Circuit**)
K and AUTO	A short in the driver's air mix control motor circuit (see **DTC B1234 or DTC indicator K and AUTO: A Short in the Driver's Air Mix Control Motor Circuit**)
L and AUTO	A problem in the driver's air mix control linkage, door, or motor circuit (see **DTC B1235 or DTC indicator L and AUTO: A Problem in the Driver's Air Mix Control Linkage, Door, or Motor Circuit**)
M and AUTO	An open in the passenger's air mix control motor circuit (see **DTC B1236 or DTC indicator M and AUTO: An Open in the Passenger's Air Mix Control Motor Circuit**)
N and AUTO	A short in the passenger's air mix control motor circuit (see **DTC B1237 or DTC indicator N and AUTO: A Short in the Passenger's Air Mix Control Motor Circuit**)
P and AUTO	A problem in the passenger's air mix control linkage, door, or motor circuit (see **DTC B1238 or DTC indicator P and AUTO: A Problem in the Passenger's Air Mix Control Linkage, Door, or Motor Circuit**)
AUTO	Climate control unit lost communication with gauge control module (ECT message) (see **DTC B1205: Climate Control Unit Lost Communication with Gauge Control Module (VSP/NE message); DTC B1206 or DTC indicator AUTO: Climate Control Unit Lost Communication with Gauge Control Module (ECT message); DTC B1207: Climate Control Unit Lost Communication with Gauge Control Module (ILLUMI message)**)
A	An open or short in the front mode control motor circuit (see **DTC B1239 or DTC indicator A: An Open or Short in the Front Mode Control Motor Circuit**)
B	A problem in the front mode control linkage, doors, or motor circuit (see **DTC B1240 or DTC indicator B: A Problem in the Front Mode Control Linkage, Doors, or Motor Circuit**)
C	A problem in the front blower motor circuit (see **DTC B1241 or DTC indicator C: A Problem in the Front Blower Motor Circuit**)
F	An open in the rear air mix control motor circuit (see **DTC B1244 or DTC indicator F: An Open in the Rear Air Mix Control Motor Circuit**)
G	A short in the rear air mix control motor circuit (see **DTC B1245 or DTC indicator G: A Short in the Rear Air Mix Control Motor Circuit**)
H	A problem in the rear air mix control linkage, door, or motor circuit (see **DTC B1246 or DTC indicator H: A Problem in the Rear Air Mix**

	Control Linkage, Door, or Motor Circuit)
J	An open or short in the recirculation control motor circuit (see **DTC B1215 or DTC indicator J: An Open or Short in the Recirculation Control Motor Circuit**)
K	A problem in the recirculation control linkage, door, or motor circuit (see **DTC B2983 or DTC indicator K: A problem in the Recirculation Control Linkage, Door, or Motor Circuit**)
M	A problem in the rear blower motor circuit (see **DTC B1223 or DTC indicator M: A Problem in the Rear Blower Motor Circuit**)
N	An open in the rear evaporator temperature sensor circuit (see **DTC B1213 or DTC indicator N: An Open in the Rear Evaporator Temperature Sensor Circuit**)
P	A short in the rear evaporator temperature sensor circuit (see **DTC B1214 or DTC indicator P: A Short in the Rear Evaporator Temperature Sensor Circuit**)
A and WINDSHIELD DEFROST	An open in the humidity sensor circuit (see **DTC B2967 or DTC indicator A and WINDSHIELD DEFROST: An Open in the Humidity Sensor Circuit**), a short in the humidity sensor circuit (see **DTC B2968 or DTC indicator A and WINDSHIELD DEFROST: A Short in the Humidity Sensor Circuit**)
Band WINDSHIELD DEFROST	An open in the A/C pressure sensor circuit (see **DTC B2979 or DTC indicator B and WINDSHIELD DEFROST: An Open in the A/C Pressure Sensor Circuit**), a short in the A/C pressure sensor circuit (see **DTC B2980 or DTC indicator B and WINDSHIELD DEFROST: A short in the A/C Pressure Sensor Circuit**)

DISPLAYING SENSOR INPUTS AT THE CLIMATE CONTROL UNIT

The climate control unit has a mode that displays sensor inputs it receives. This mode shows you what the climate control unit is receiving from each of the sensors, one at a time, and it can help you determine if a sensor is faulty.

CHECK THESE ITEMS BEFORE USING THE SENSOR INPUT DISPLAY MODE

1. Turn the ignition switch to ON (II), and check the recirculation door function; press the recirculation button to switch from FRESH to RECIRC. The air volume and sound should change slightly.
2. Set the temperature control knob to the desired test temperature. When selecting the test temperature, note these items:
   - "Lo" temperature setting will default to MAX COOL, VENT, and RECIRC.
   - "Hi" temperature setting will default to MAX HOT, FLOOR, and FRESH.
   - 58 through 86°F settings will use the automatic climate control logic.
3. Turn the ignition switch to LOCK (0).

TO RUN THE SENSOR INPUT DISPLAY MODE, FOLLOW THESE STEPS

1. Turn the ignition switch to LOCK (0).
2. Press and hold both the AUTO and RECIRCULATION CONTROL buttons, then start the engine.
3. After the engine starts, release both buttons. The display panel control unit will flash the sensor number and then the value for that sensor. Record the value displayed.
4. To advance to the next sensor, press the REAR WINDOW DEFOGGER button.

SENSOR DISPLAYED CHART

Sensor	Item	Displayed Value
1	In-car Temperature	°C
2	Outside Air Temperature	°C
3	Solar Radiation Sensor Value: Dark = 00, Flashlight = 04, Cloudy = 10, Sunny = 65	$kcal/m^2 .h$
4	Front Evaporator Outlet Air Temperature	°C
5	Driver's and Passenger's Air Mix Opening (Low value indicates cooler air distribution, higher value indicates warmer air distribution)	% of opening
6	Vent Temperature Air Out (TAO)	°C
7	Vehicle Speed (Vehicle must be driven to display speed)	km/h
8	A/C Pressure	10 kPa
9	Rear Air Mix Opening	% of opening
A	Rear Vent Temperature Air Out (TAO)	°C
B	Rear Evaporator Outlet Air Temperature	°C
C	Humidity Sensor Value	%rh
D	Fog Margin	°C
E	Solar Radiation azimuth (With navigation system)	10°
F	Solar Radiation angle of elevation (With navigation system)	10°

NOTE:

- **The sensor values will be displayed in degrees Celsius (°C) or an alphanumeric code. Use the chart to convert the value to degrees Fahrenheit (°F).**
- **If the sensor value displays "Er" this indicates there is an open or short in the circuit or sensor. Check for DTCs using the HDS, or refer to CHECKING DTCS by DTC indication.**
- **If necessary, compare the sensor input display to a known-good vehicle under the same test conditions.**
- **If the sensor is out of the normal range, refer to the sensor test or substitute a known-good sensor, and recheck.**

5. To cancel the sensor input display mode, press the AUTO button or turn the ignition switch to LOCK (0).

Celsius to Fahrenheit Conversion Table

CELSIUS TO FAHRENHEIT CONVERSION CHART

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0	32	10	50	20	68	30	86	40	104
1	34	11	52	21	70	31	88	41	106
2	36	12	54	22	72	32	90	42	108
3	37	13	55	23	73	33	91	43	109
4	39	14	57	24	75	34	93	44	111
5	41	15	59	25	77	35	95	45	113
6	43	16	61	26	79	36	97	46	115
7	45	17	63	27	81	37	99	47	117
8	46	18	64	28	82	38	100	48	118
9	48	19	66	29	84	39	102	49	120

CELSIUS TO FAHRENHEIT CONVERSION CHART

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
50	122	60	140	70	158	80	176	90	194
51	124	61	142	71	160	81	178	91	196
52	126	62	144	72	162	82	180	92	198
53	127	63	145	73	163	83	181	93	199
54	128	64	147	74	165	84	183	94	201
55	131	65	149	75	167	85	185	95	203
56	133	66	151	76	169	86	187	96	205
57	135	67	152	77	170	87	188	97	207
58	136	68	154	78	172	88	190	98	208
59	139	69	158	79	174	89	192	99	210

Alphanumeric Conversion Table

ALPHANUMERIC CONVERSION CHART

Display Reading (Alphanumeric)	°C	°F	%
A1 thru A9	- 1 thru -9	30 thru 16	- 1 thru -9
B0 thru B9	- 10 thru -19	14 thru -2	-10 thru -19
C0 thru C9	-20 thru -29	-4 thru -20	-20 thru -29
D0 thru D9	-30 thru -39	-22 thru -38	-30 thru -39
E0 thru E9	-40 thru -49	-40 thru -58	-40 thru -49
F0 thru F9	--	--	+100 thru +109

DTC TROUBLESHOOTING INDEX

Checking the DTCs by HDS

DTC TROUBLESHOOTING CHART

DTC	Detection Item or Symptom	ECU	DTC type
B1200	Communication bus line error (bus-off)	Climate control unit	Loss of communication
B1202	Climate control unit internal error	Climate control unit	Internal error
B1205	Climate control unit lost communication with gauge control module (VSP/NE message)	Climate control unit	Loss of communication
B1206	Climate control unit lost communication with gauge control module (ECT message)	Climate control unit	Loss of communication
B1207	Climate control unit lost communication with gauge control module (ILLUMI message)	Climate control unit	Loss of communication
B1213	An open in the rear evaporator temperature sensor circuit	Climate control unit	Signal error
B1214	A short in the rear evaporator temperature sensor circuit	Climate control unit	Signal error
B1215	An open or short in the recirculation control motor circuit	Climate control unit	Signal error
B1223	A problem in the rear blower motor circuit	Climate control unit	Signal error
B1225	An open in the in-car temperature sensor circuit	Climate control unit	Signal error
B1226	A short in the in-car temperature sensor circuit	Climate control unit	Signal error
B1227	An open in the outside air temperature sensor circuit	Climate control unit	Signal error
B1228	A short in the outside air temperature sensor circuit	Climate control unit	Signal error
B1229	An open in the sunlight sensor circuit	Climate control unit	Signal error
B1230	A short in the sunlight sensor circuit	Climate control unit	Signal error
B1231	An open in the front evaporator temperature sensor circuit	Climate control unit	Signal error
B1232	A short in the front	Climate control unit	Signal error

	evaporator temperature sensor circuit		
B1233	An open in the driver's air mix control motor circuit	Climate control unit	Signal error
B1234	A short in the driver's air mix control motor circuit	Climate control unit	Signal error
B1235	A problem in the driver's air mix control linkage, door, or motor circuit	Climate control unit	Signal error
B1236	An open in the passenger's air mix control motor circuit	Climate control unit	Signal error
B1237	A short in the passenger's air mix control motor circuit	Climate control unit	Signal error
B1238	A problem in the passenger's air mix control linkage, door, or motor circuit	Climate control unit	Signal error
B1239	An open or short in the front mode control motor circuit	Climate control unit	Signal error
B1240	A problem in the front mode control linkage, doors, or motor circuit	Climate control unit	Signal error
B1241	A problem in the front blower motor circuit	Climate control unit	Signal error
B1244	An open in the rear air mix control motor circuit	Climate control unit	Signal error
B1245	A short in the rear air mix control motor circuit	Climate control unit	Signal error
B1246	A problem in the rear air mix control linkage, door, or motor circuit	Climate control unit	Signal error
B2965	Climate control unit lost communication with rear climate control panel	Climate control unit	Loss of communication
B2967	An open in the humidity sensor circuit	Climate control unit	Signal error
B2968	A short in the humidity sensor circuit	Climate control unit	Signal error
B2969	Climate control unit lost communication with combination switch control unit (WIPSW	Climate control unit	Loss of communication

	message)		
B2970	Climate control unit lost communication with relay control module (RM message)	Climate control unit	Loss of communication
B2979	An open in the A/C pressure sensor circuit	Climate control unit	Signal error
B2980	A short in the A/C pressure sensor circuit	Climate control unit	Signal error
B2981	Climate control unit lost communication with navigation unit	Climate control unit	Loss of communication
B2983	A problem in the recirculation control linkage, door, or motor circuit	Climate control unit	Signal error
B2991	Climate control unit lost communication with audio unit	Climate control unit	Loss of communication

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING CHART

Symptom	Diagnostic procedure	Also check for
Rear mode control doors do not change between ceiling vents (cool) and floor vents (hot)	Rear mode control motor circuit troubleshooting (see **REAR MODE CONTROL MOTOR CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 30 (10 A) in the under-dash fuse/relay box • Cleanliness and tightness of all terminals
Blower, heater controls, and A/C do not work	Climate control unit troubleshooting (see **CLIMATE CONTROL UNIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 30 (10 A) in the under-dash fuse/relay box • Poor ground at G506 (see **GROUND TO COMPONENTS INDEX**) • Cleanliness and tightness of all terminals
		• HVAC DTCs (see **GENERAL TROUBLESHOOTING**

Both fans do not run at low speed with the A/C on (but the A/C compressor runs with the A/C on)	Radiator and A/C condenser fan low speed circuit troubleshooting (see **RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING**)	**INFORMATION**) • Blown fuse No. 15 (30 A) in the relay block, and No. 30 (10 A) in the under-dash fuse/ relay box • Poor ground at G301 (see **GROUND TO COMPONENTS INDEX**) • Cleanliness and tightness of all terminals
The A/C condenser fan does not run at high speed (but both fans run at low speed and the A/C compressor operates with the A/C on)	A/C condenser fan high speed circuit troubleshooting (see **A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all terminals
Both fans do not run at high speed with the A/C on (but both fans run at low speed and the A/C compressor operates with the A/C on)	ECT troubleshooting: ECT sensor 2 circuit low voltage (see **DTC P2184: ECT SENSOR 2 CIRCUIT LOW VOLTAGE**), ECT sensor 2 circuit high voltage (see **DTC P2185: ECT SENSOR 2 CIRCUIT HIGH VOLTAGE**)	• Powertrain DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Cleanliness and tightness of all terminals
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see **A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING**)	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 17 (7.5 A) in the relay block, and No. 30 (10 A) in the under-dash fuse/ relay box • Blower motor operation • Cleanliness and tightness of all terminals
Blower fan(s) runs slower than expected in cold weather	ECT troubleshooting: ECT sensor 2 circuit low voltage (see **DTC P2184: ECT SENSOR 2 CIRCUIT LOW VOLTAGE**), ECT sensor 2 circuit high voltage (see **DTC P2185: ECT SENSOR 2 CIRCUIT HIGH VOLTAGE**) **NOTE:** **It is normal for the blower(s) to run slowly until the engine coolant temperature begins to rise. If the blower**	• Powertrain DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blower motor operation

	continues to run slowly for an abnormal length of time, continue to troubleshoot the problem.	
HDS does not communicate with the climate control unit or the vehicle	Troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING**)	
Insufficient heating	1. Check the coolant level (see **COOLANT CHECK**) 2. Check the radiator cap (see **RADIATOR CAP TEST**) 3. Check the operation of the air mix control motor and door (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**) 4. Check the coolant temperature 5. Check the operation of the heater valve (see **HEATER VALVE CABLE ADJUSTMENT**) 6. Check the blower motor unit for obstructions 7. Check for air leaks around the ducts and vents 8. Check the inlet hose temperature • If it is COLD, check for restrictions in the hose, a damaged or leaking thermostat, and a damaged or leaking water pump. • If it is HOT, check for restrictions in the heater core. Back flush the heater core using standard commercially available equipment, or replace the heater core.	Damaged cylinder head gasket

SYSTEM DESCRIPTION

The air conditioning system removes heat from the passenger compartment by transferring heat from the ambient air to the evaporator. The evaporator cools the air with the refrigerant that is circulating through the evaporator. The refrigerant expands in the evaporator, and the evaporator becomes very cold and absorbs the heat from the ambient air. The blower fan pushes air across the evaporator where the heat is absorbed, and then it blows the cool air into the passenger compartment.

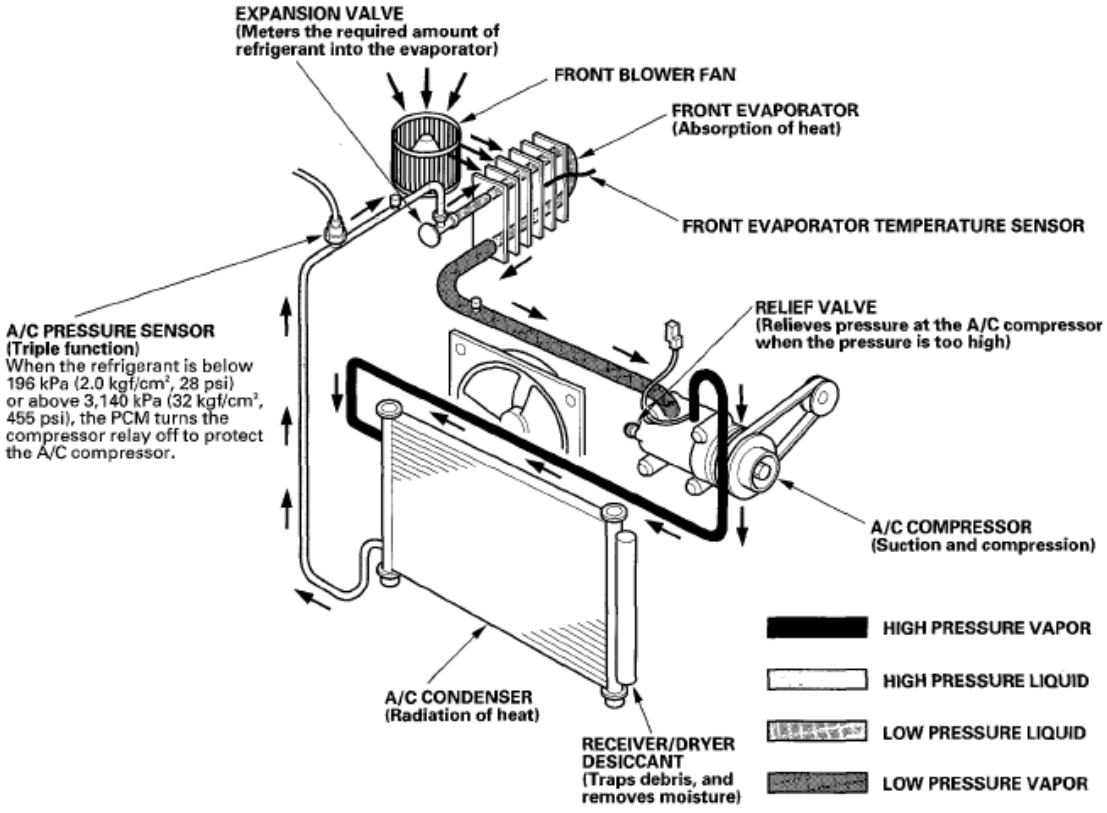

EXPANSION VALVE
(Meters the required amount of refrigerant into the evaporator)
FRONT BLOWER FAN
FRONT EVAPORATOR
(Absorption of heat)
FRONT EVAPORATOR TEMPERATURE SENSOR
A/C PRESSURE SENSOR
(Triple function)
When the refrigerant is below 196 kPa (2.0 kgf/cm², 28 psi) or above 3,140 kPa (32 kgf/cm², 455 psi), the PCM turns the compressor relay off to protect the A/C compressor.
RELIEF VALVE
(Relieves pressure at the A/C compressor when the pressure is too high)
A/C COMPRESSOR
(Suction and compression)
HIGH PRESSURE VAPOR
HIGH PRESSURE LIQUID
LOW PRESSURE LIQUID
LOW PRESSURE VAPOR
A/C CONDENSER
(Radiation of heat)
RECEIVER/DRYER
DESICCANT
(Traps debris, and removes moisture)

Fig. 12: Climate Control System Description
Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant, which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a A/C compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in A/C compressor failure.
- All A/C system parts (A/C compressor, discharge line, suction line, evaporator, A/C condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.
- R-12 and R-134a refrigerant servicing equipment are not interchangeable. Use only a recovery/recycling/charging station that is U.L.-listed and is certified to meet the requirements of SAE J2210 to service the R-134a air conditioning systems.
- Always recover refrigerant R-134a with an approved recovery/recycling/charging station before disconnecting any A/C fitting.

HUMIDITY/IN-CAR TEMPERATURE SENSOR

The humidity sensor consists of two sensors. One sensor is for humidity detection, and the other is for in-car temperature detection. When the climate control unit receives signals about the in-car condition from the humidity sensor, and judges that the humidity in the vehicle is very low, the climate control unit reduces the compressor run-time. Engine power loss is kept to a minimum, and fuel economy is increased.

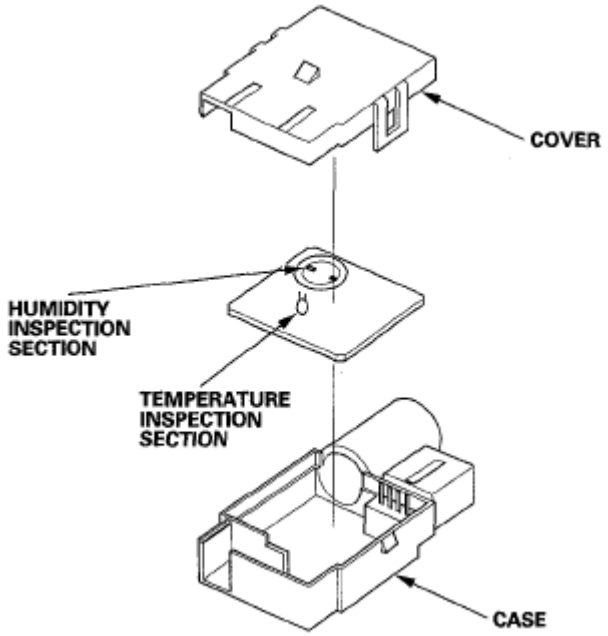


Fig. 13: Identifying Humidity/In-Car Temperature Sensor Component
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HUMIDITY/IN-CAR TEMPERATURE SENSOR QUALITY

The capacitance of the humidity sensor changes by the adsorption and the evaporation of moisture. The resistance change of the humidity sensor changes the output voltage.

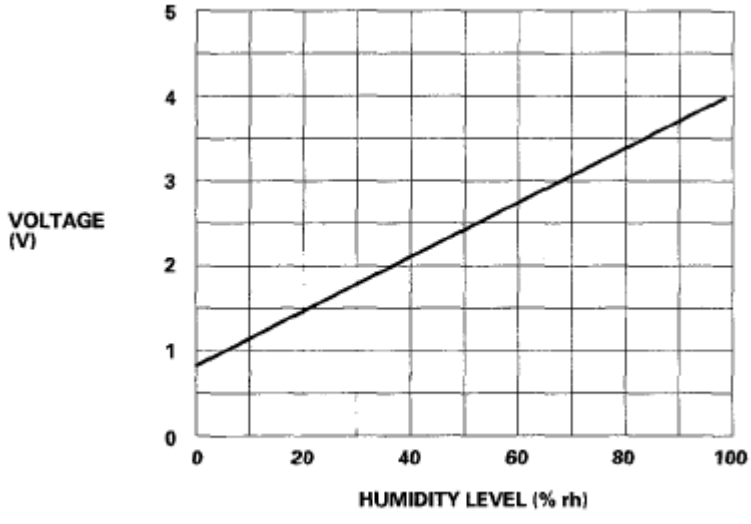


Fig. 14: Voltage Vs Humidity Level Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C PRESSURE SENSOR

The A/C pressure sensor converts A/C pressure into electrical signals to the PCM.

NOTE: The pressures can be monitored using the HDS PGM-FI Data List.

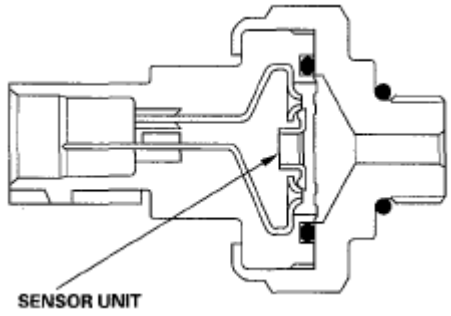


Fig. 15: Identifying A/C Pressure Sensor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The response of the A/C pressure sensor is shown in the graph.

NOTE: When the refrigerant is below 196 kPa (2.0 kgf/cm^2 , 28 psi) or above 3,140 kPa (32 kgf/cm^2 , 455 psi), the PCM turns the compressor relay off to protect the A/C compressor.

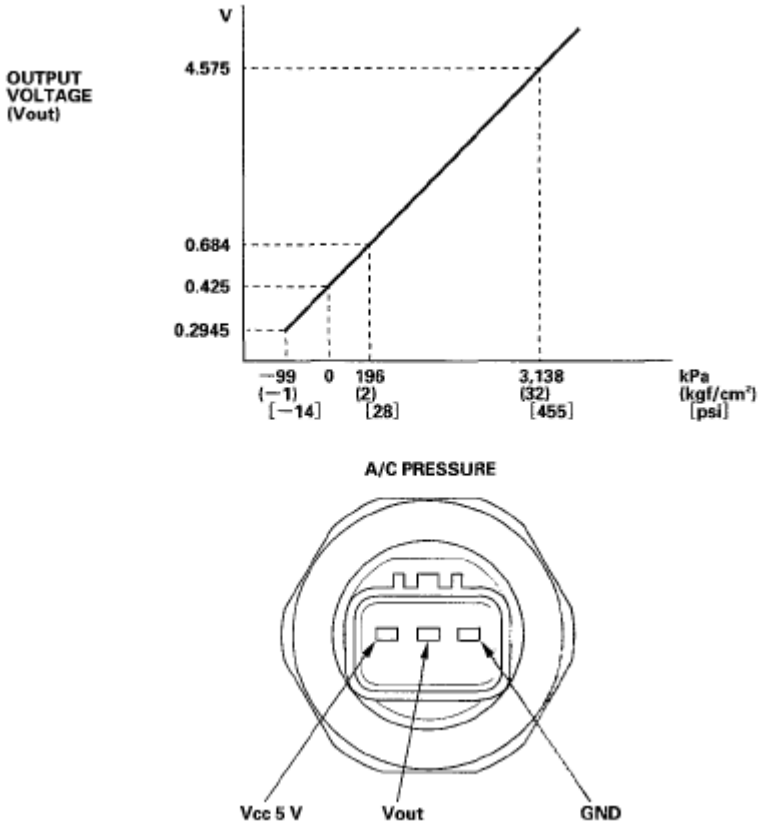


Fig. 16: A/C Pressure Sensor Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CLIMATE CONTROL DOOR POSITIONS

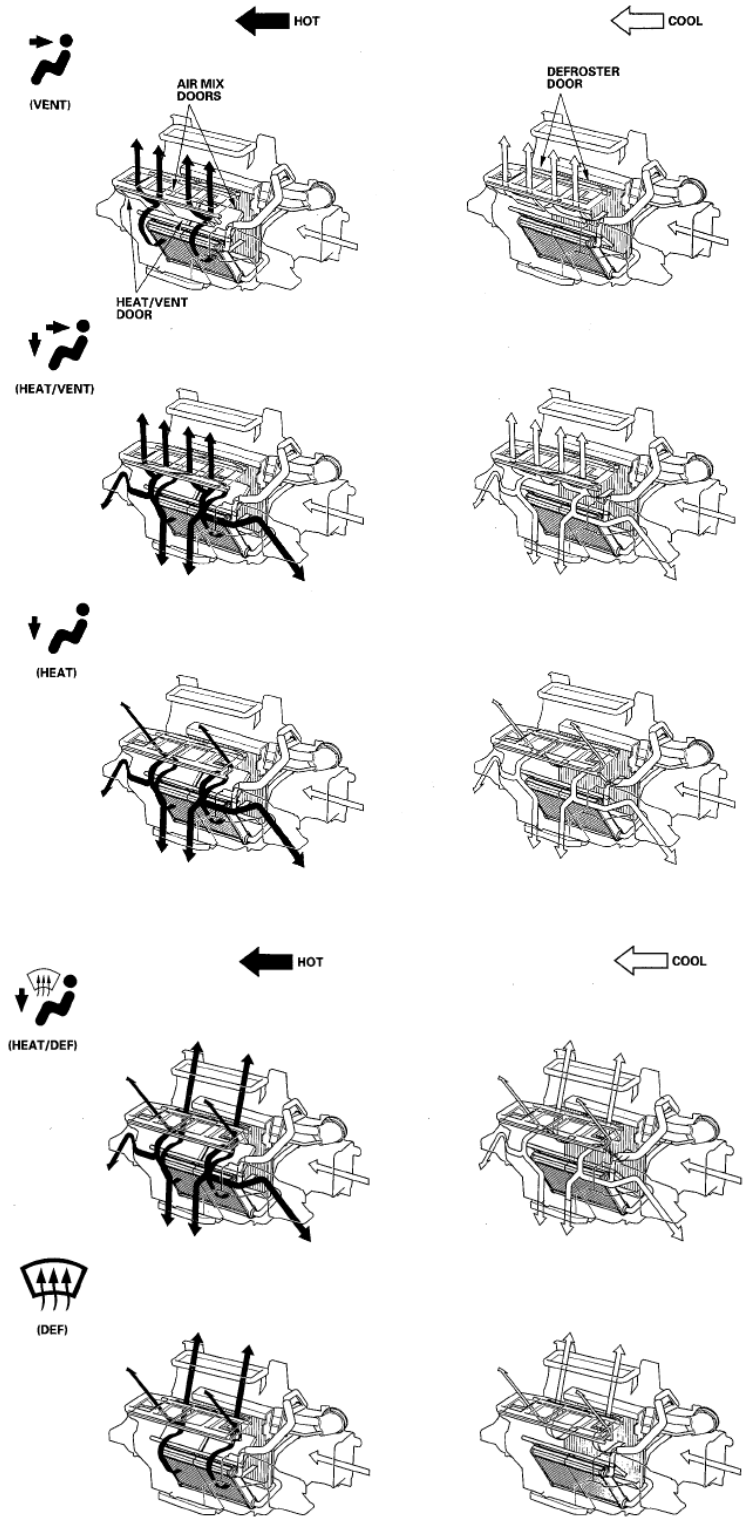


Fig. 17: Identifying Climate Control Door Positions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DUAL AIR MIX CONTROL SYSTEM

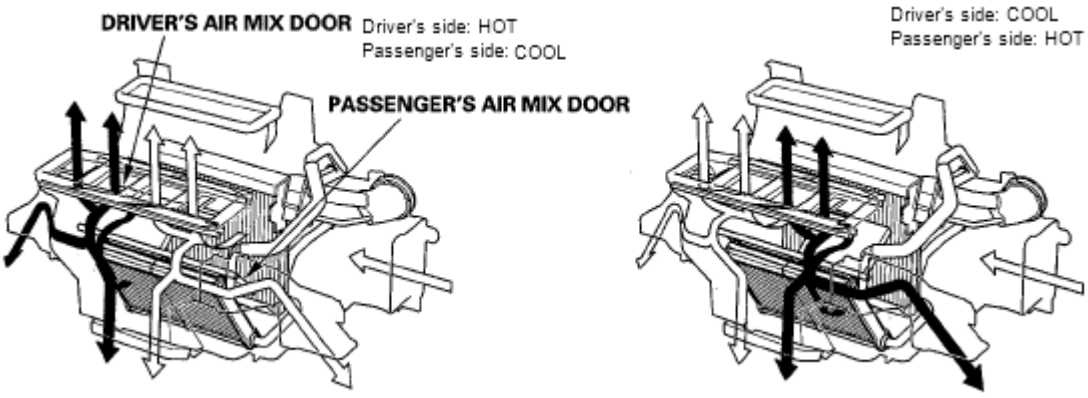


Fig. 18: Identifying Dual Air Mix Control System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

I-DUAL AND I-TRI CLIMATE CONTROL SYSTEM (WITH NAVIGATION SYSTEM)

The "i-Dual" climate control system automatically controls the temperature and the vent mode of the air direction to the driver's and passenger's side, depending on the angle of the sun, and the direction of the vehicle. It calculates information such as date, time, longitude, and latitude from the navigation system, as well as the radiant strength of the sun from the sunlight sensor, to determine the appropriate mode position and temperature to be directed to each side. The "i-Tri" climate control system is an addition of the automatic controls with the temperature and the vent mode of the air direction to the rear section to the "i-Dual" climate control system.

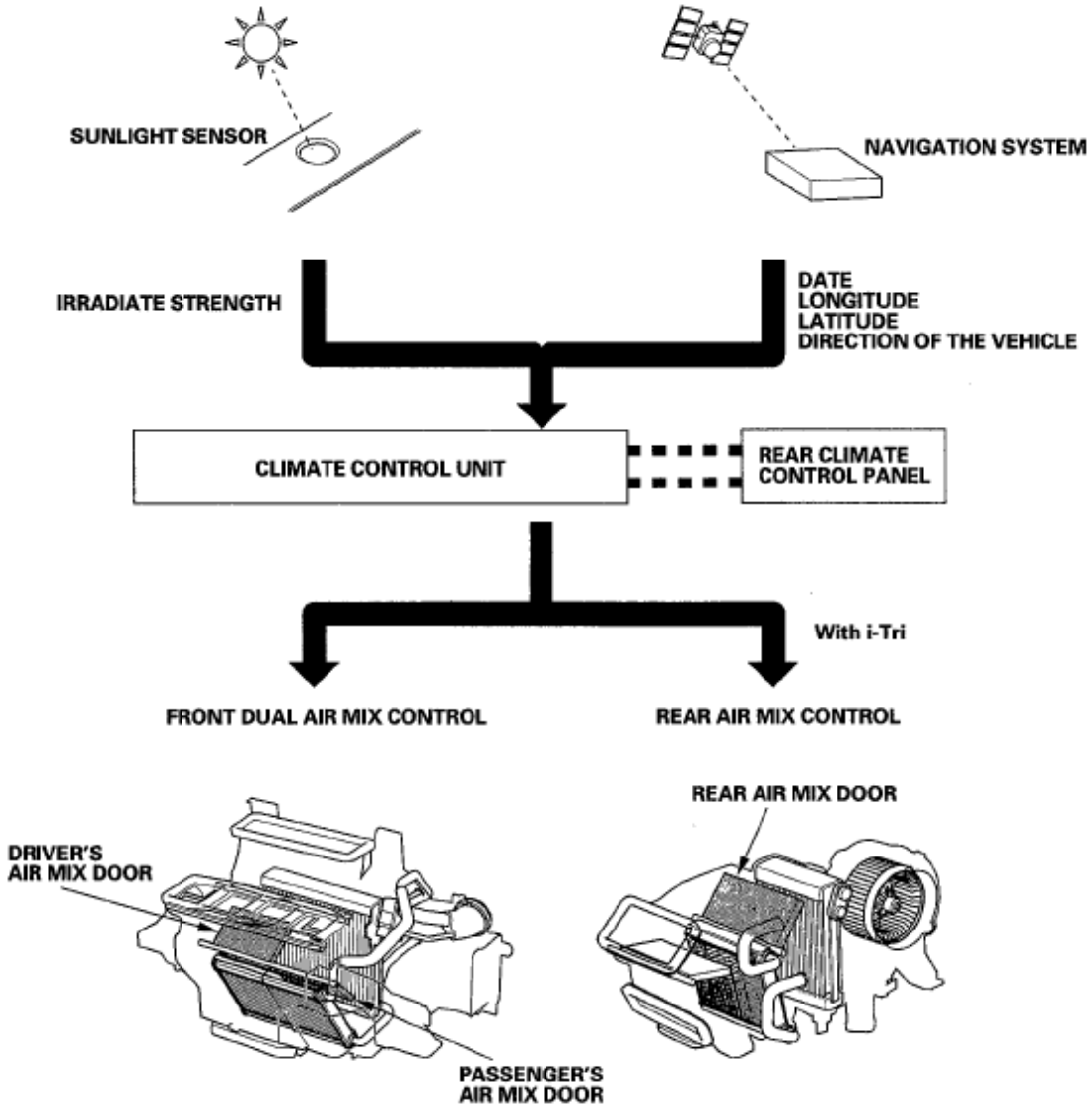


Fig. 19: Identifying I-Dual And I-Tri Climate Control System
Courtesy of AMERICAN HONDA MOTOR CO., INC.

In the event that the navigation system malfunctions, or when driving in areas where the navigation system cannot determine the vehicle position (non-coverage areas, tunnels, etc.), the climate control system will operate the same as a vehicle without a navigation system.

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

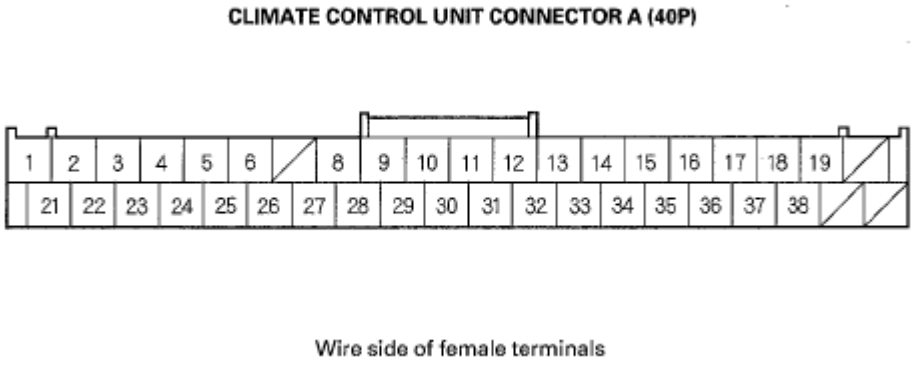


Fig. 20: Identifying Climate Control Unit Connector A (40P) Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTOR A

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS - CONNECTOR A

Cavity	Wire color	Signal	
1	WHT	BACKUP	INPUT
2	YEL	NAVIGATION UNIT (SI)(1)	INPUT
3	YEL	IG2 (Power)	INPUT
4	LT GRN	B-CAN	INPUT/OUTPUT
5	LT BLU	IN-CAR TEMPERATURE SENSOR	OUTPUT
6	GRY	COMMON POTENTIAL 5V	OUTPUT
8	RED	SENSOR COMMON GROUND	INPUT
9	BLU	FRONT BLOWER FEEDBACK	INPUT
10	RED	FRONT POWER TRANSISTOR CONTROL	OUTPUT
11	PUR	DRIVER'S AIR MIX POTENTIAL	INPUT
12	PNK	DRIVER'S AIR MIX HOT	OUTPUT
13	LT BLU	DRIVER'S AIR MIX COOL	OUTPUT
14	LT GRN	PASSENGER'S AIR MIX HOT	OUTPUT
15	YEL	PASSENGER'S AIR MIX COOL	OUTPUT
16	GRN	FRONT MODE DEF	OUTPUT
17	ORN	FRONT MODE VENT	OUTPUT
18	YEL	FRESH	OUTPUT
19	ORN	RECIRCULATE	OUTPUT
21	BLU	NAVIGATION UNIT(CLK)(1)	OUTPUT
22	RED	NAVIGATION UNIT (SO)(1)	OUTPUT
23	LT BLU	ILLUMK+)	INPUT
24	BRN	FRONT EVAPORATOR TEMPERATURE SENSOR	OUTPUT
25	PUR	ACC	INPUT
26	LT GRN	A/C PRESSURE SENSOR	OUTPUT

27	YEL	HUMIDITY SENSOR	OUTPUT
28	PNK	OUTSIDE AIR TEMPERATURE SENSOR	OUTPUT
29	PUR	SUNLIGHT SENSOR	OUTPUT
30	BLU	PASSENGER'S AIR MIX POTENTIAL	INPUT
31	WHT	FRONT MODE CONTROL MODE 1	OUTPUT
32	LT GRN	FRONT MODE CONTROL MODE 2	OUTPUT
33	PUR	FRONT MODE CONTROL MODE 3	OUTPUT
34	BLU	FRONT MODE CONTROL MODE 4	OUTPUT
35	WHT	RECIRCULATION CONTROL MODE 1	OUTPUT
36	BLK	RECIRCULATION CONTROL MODE 2	OUTPUT
37	BLK	GROUND (G506)	OUTPUT
38	GRN	RECIRCULATION CONTROL MODE 3	OUTPUT
(1) With navigation system			

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

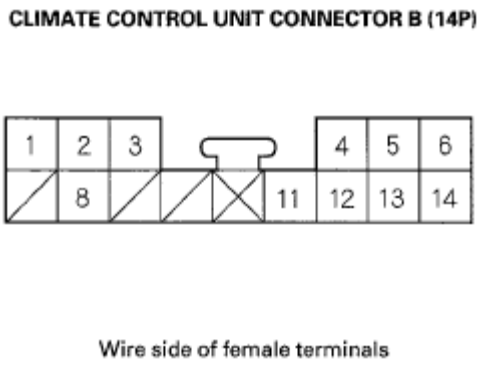


Fig. 21: Identifying Climate Control Unit Connector B (14P) Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CONNECTOR B

CLIMATE CONTROL UNIT INPUTS AND OUTPUTS - CONNECTOR B

Cavity	Wire color	Signal	
1	GRN	REAR AIR MIX COOL	OUTPUT
2	PNK	REAR AIR MIX HOT	OUTPUT
3	YEL	REAR MODE HEAT	INPUT
4	BLK	REAR MODE VENT	INPUT
5	PUR	REAR AIR MIX POTENTIAL	INPUT
6	LT BLU	REAR EVAPORATOR TEMPERATURE SENSOR	OUTPUT
8	BLU	AUDIO UNIT (HVAC BUS)	INPUT/OUTPUT
11	ORN	REAR CLIMATE CONTROL PANEL (A/C BUS RX)	INPUT/OUTPUT
12	GRN	REAR CLIMATE CONTROL PANEL (A/C BUS TX)	INPUT/OUTPUT

13	RED	REAR BLOWER FEEDBACK	INPUT
14	BLU	REAR POWER TRANSISTOR CONTROL	OUTPUT

REAR CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

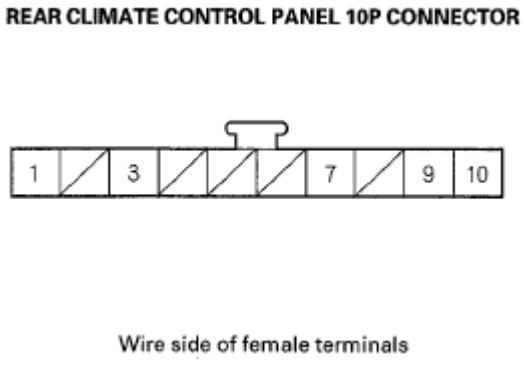


Fig. 22: Identifying Rear Climate Control Panel 10P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

REAR CLIMATE CONTROL UNIT INPUTS AND OUTPUTS

Cavity	Wire color	Signal	
1	YEL	IG2 (Power)	INPUT
3	BLK	GROUND (G506)	OUTPUT
7	LT BLU	ILLUMI (+)	INPUT
9	GRN	CLIMATE CONTROL UNIT (A/C BUS TX)	INPUT/OUTPUT
10	ORN	CLIMATE CONTROL UNIT (A/C BUS RX)	INPUT/OUTPUT

CIRCUIT DIAGRAM

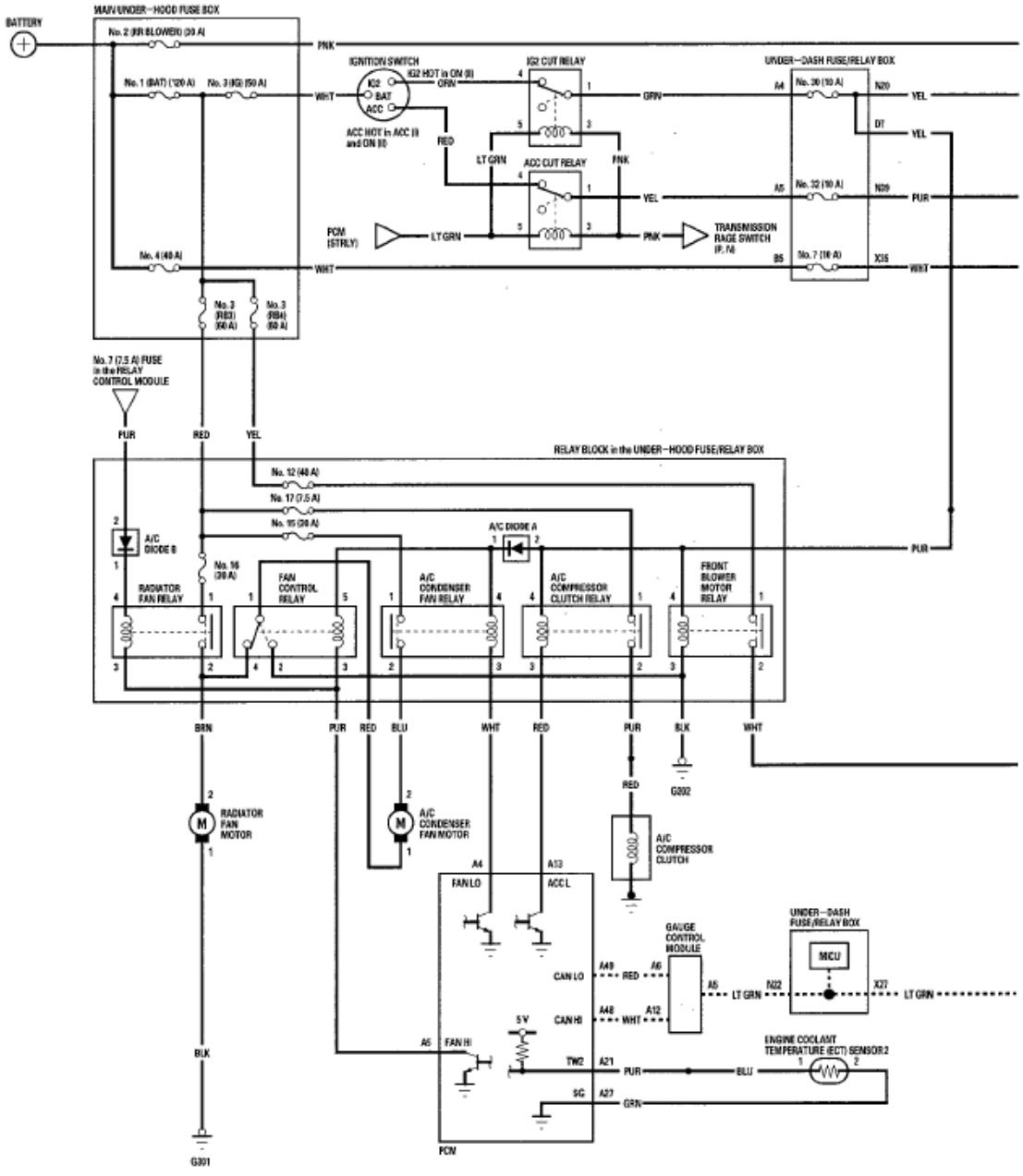


Fig. 23: Climate Control Circuit Diagram (1 Of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

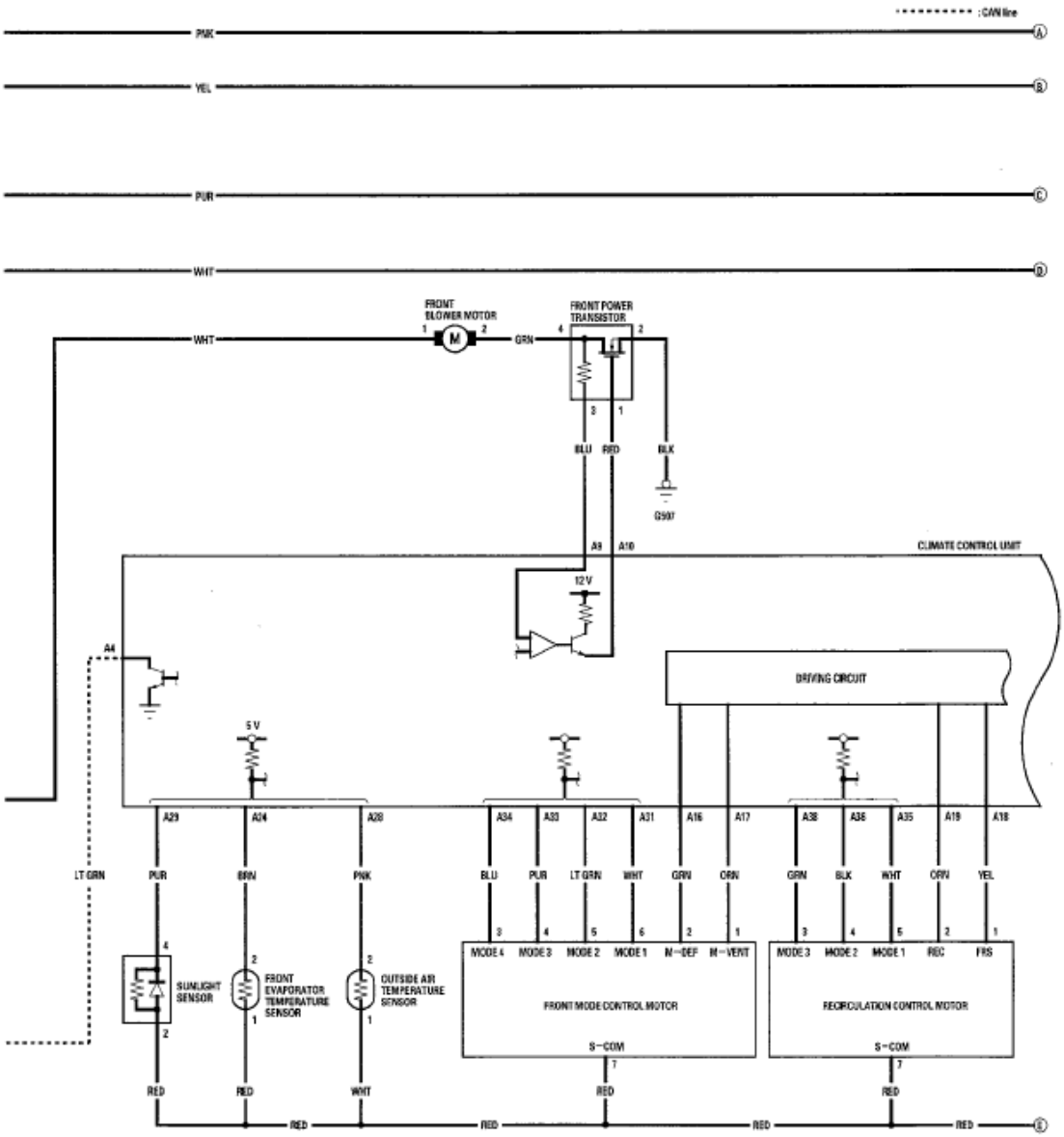


Fig. 24: Climate Control Circuit Diagram (2 Of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

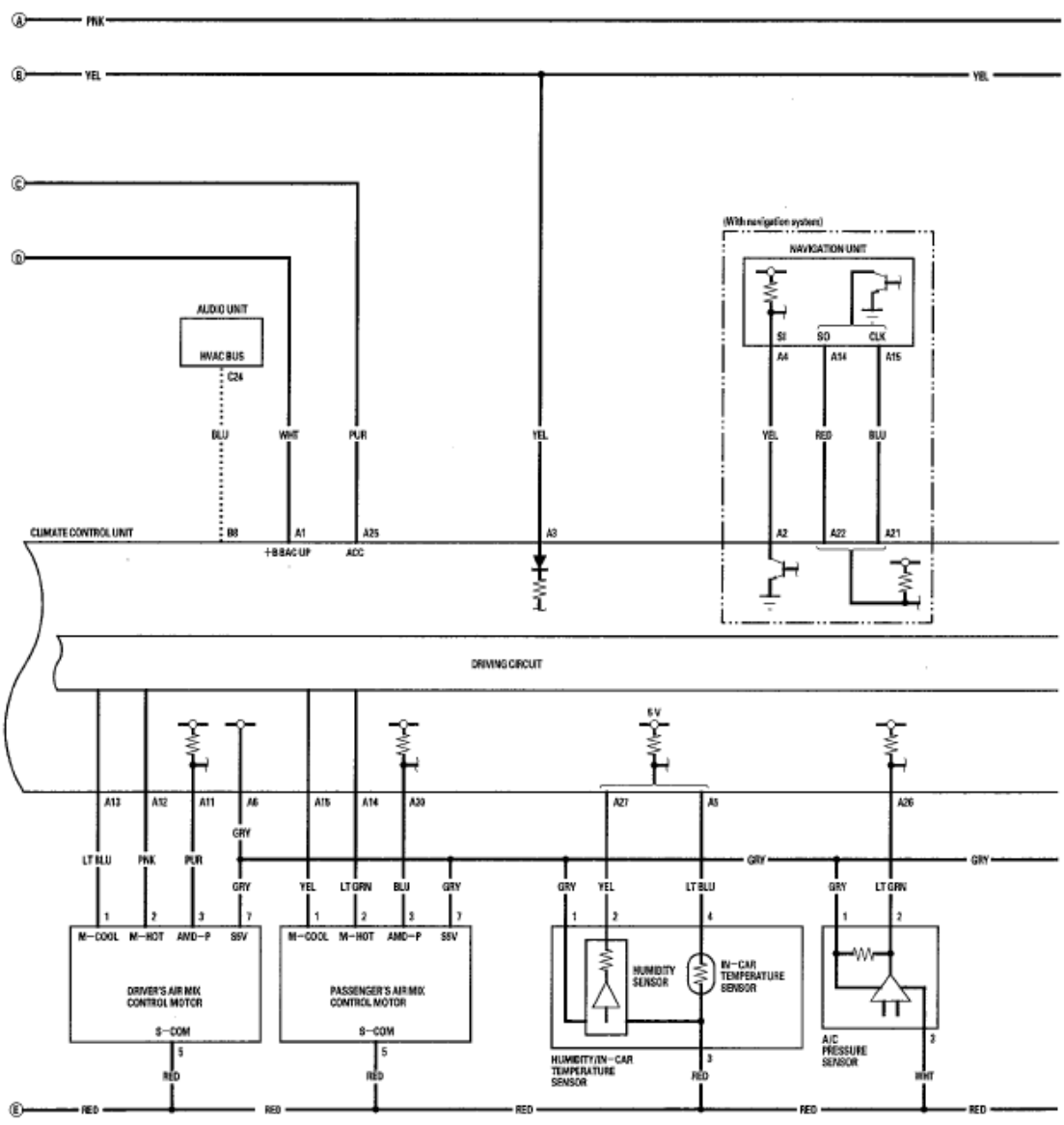


Fig. 25: Climate Control Circuit Diagram (3 Of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

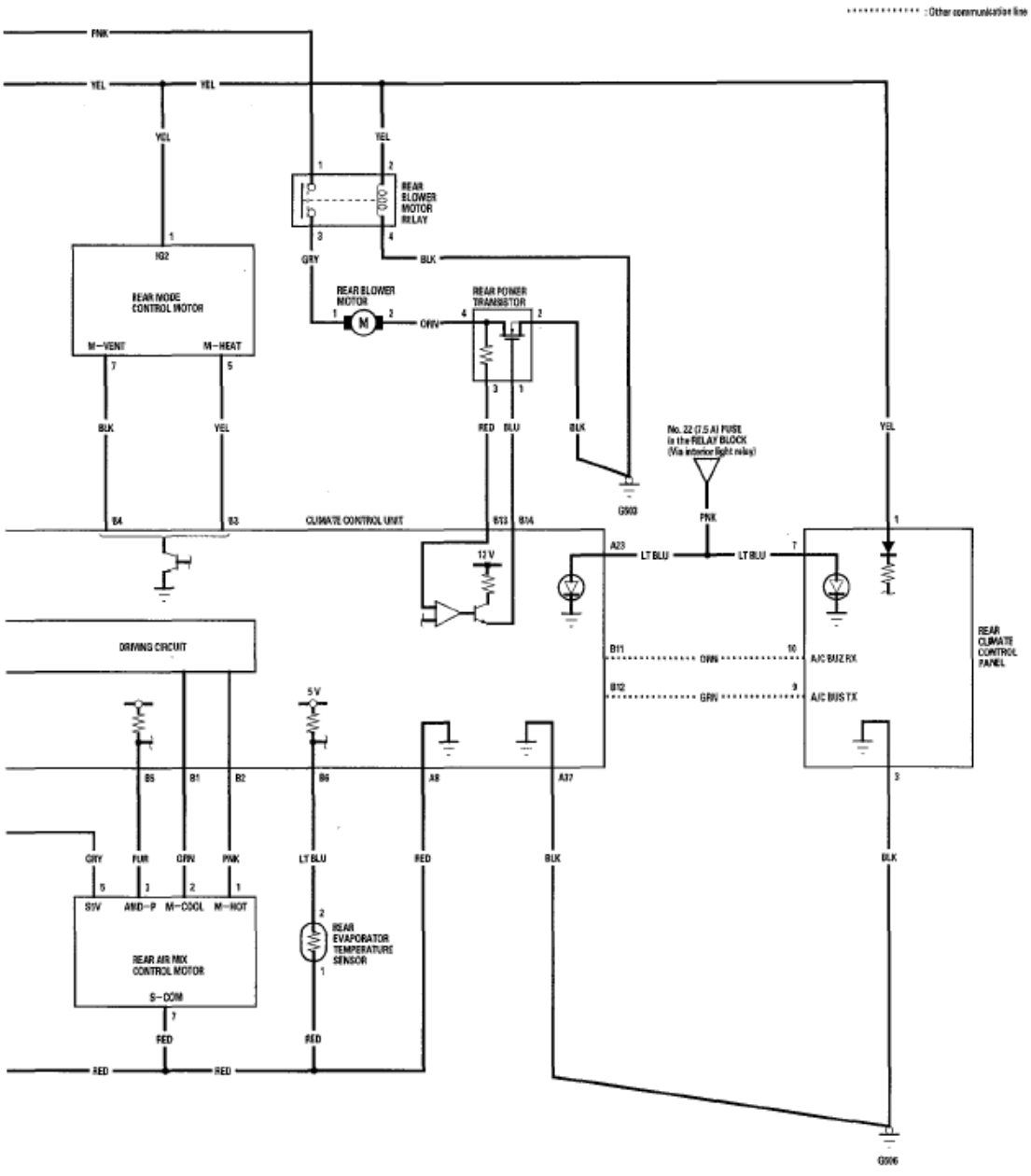


Fig. 26: Climate Control Circuit Diagram (4 Of 4)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1202: CLIMATE CONTROL UNIT INTERNAL ERROR

NOTE: Check the battery condition (see BATTERY TEST) and the charging system (see CHARGING SYSTEM INDICATOR CIRCUIT TROUBLESHOOTING).

1. Clear the DTC with the HDS.

2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Wait for 6 seconds or more.
4. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
5. Check for DTCs.

   Is DTC B1202 indicated?

   YES - The climate control unit is faulty, replace the climate control unit.

   NO - Intermittent failure, the climate control unit is OK at this time.

DTC B1205: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH GAUGE CONTROL MODULE (VSP/NE MESSAGE); DTC B1206 OR DTC INDICATOR AUTO: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH GAUGE CONTROL MODULE (ECT MESSAGE); DTC B1207: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH GAUGE CONTROL MODULE (ILLUMI MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-can diagnosis test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Wait for 6 seconds or more.
4. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
5. Check the DTCs.

   Are DTCs B1205, and/or B1206 or AUTO, and/or B1207 indicated?

   YES - Go to step 6.

   NO - Intermittent failure, check for loose wires or poor connections on the climate control unit connector A (40P).

6. Check for DTCs using the HDS.

   Are any of the following DTCs indicated; B1011, B1060, B2160, B1357, B1805, B1408, or B2157?

   YES - Do the gauge control module input test (see **GAUGE CONTROL MODULE INPUT TEST**).

   NO - Do the climate control unit troubleshooting (see **CLIMATE CONTROL UNIT**

TROUBLESHOOTING).

DTC B1213 OR DTC INDICATOR N: AN OPEN IN THE REAR EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1213 or N indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the rear evaporator temperature sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Remove the rear evaporator temperature sensor (see **REAR EVAPORATOR TEMPERATURE SENSOR TEST**), and test it (see **REAR EVAPORATOR TEMPERATURE SENSOR TEST**).

   Is the rear evaporator temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the rear evaporator temperature sensor.

7. Disconnect climate control unit connector B (14P).
8. Check for continuity between climate control unit connector B (14P) No. 6 terminal and the rear evaporator temperature sensor 2P connector No. 2 terminal.

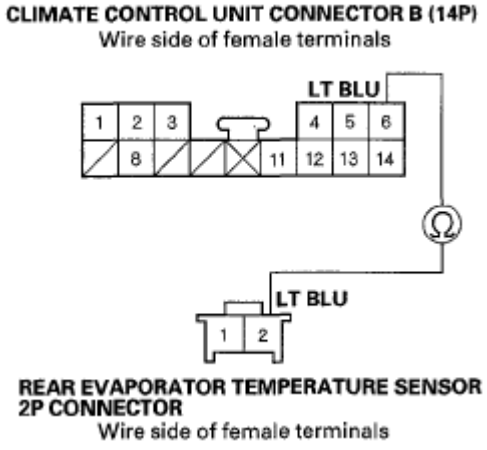


Fig. 27: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 6 And No. 2 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the rear evaporator temperature sensor.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and the rear evaporator temperature sensor 2P connector No. 1 terminal.

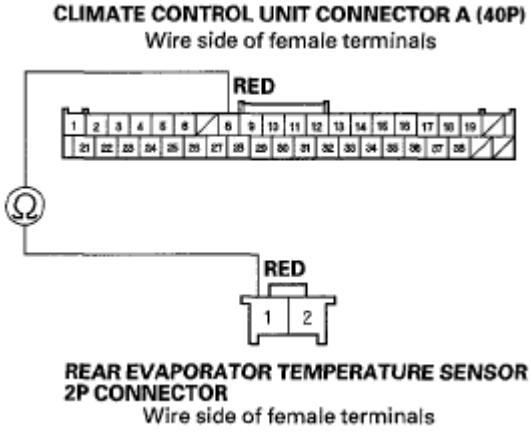


Fig. 28: Identifying Continuity Between No. 8 And Rear Evaporator Temperature Sensor 2P Connector No. 1 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P), B (14P), and at the rear evaporator temperature sensor 2P connector. If the connections are good, substitute a known-

good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Repair open in the wire between the climate control unit and the rear evaporator temperature sensor.

DTC B1214 OR DTC INDICATOR P: A SHORT IN THE REAR EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1214 or P indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Remove the rear evaporator temperature sensor (see **REAR EVAPORATOR TEMPERATURE SENSOR TEST**), and test it (see **REAR EVAPORATOR TEMPERATURE SENSOR TEST**).

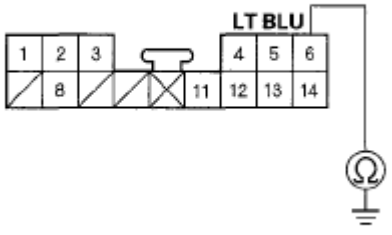
   Is the rear evaporator temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the rear evaporator temperature sensor.

7. Disconnect climate control unit connector A (40P) and B(14P).
8. Check for continuity between climate control unit connector B (14P) No. 6 terminal and body ground.

CLIMATE CONTROL UNIT CONNECTOR B (14P)



Wire side of female terminals

Fig. 29: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the rear evaporator temperature sensor.

NO - Go to step 9.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and climate control unit connector B (14P) No. 6 terminal.

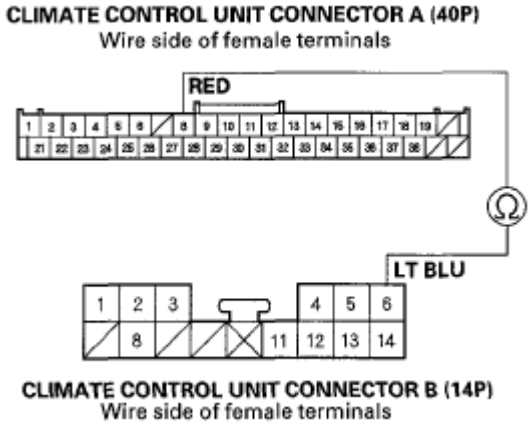

CLIMATE CONTROL UNIT CONNECTOR A (40P)
Wire side of female terminals
RED
LT BLU
1 2 3 4 5 6
8 11 12 13 14
CLIMATE CONTROL UNIT CONNECTOR B (14P)
Wire side of female terminals

Fig. 30: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 6 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the rear evaporator temperature sensor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1215 OR DTC INDICATOR J: AN OPEN OR SHORT IN THE RECIRCULATION CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).

4. Check for DTCs.

   Is DTC B1215 or J indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the recirculation control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**).

   Is the recirculation control motor OK?

   YES - Go to step 7.

   NO - Replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**).

7. Disconnect the recirculation control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the recirculation control motor 7P connector.

   40P: 7P:

   No. 8 No. 7

   No. 35 No. 5

   No. 36 No. 4

   No. 38 No. 3

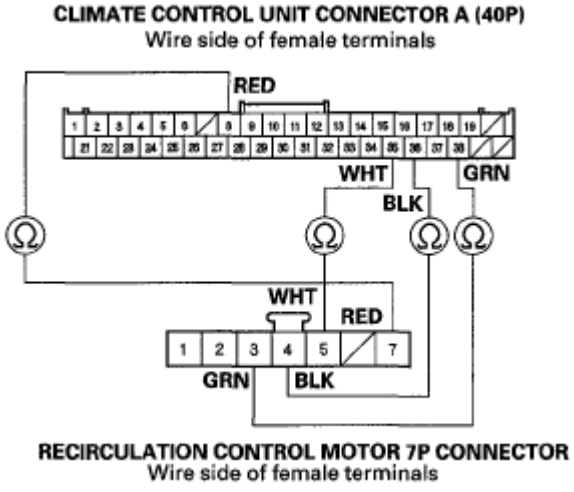


Fig. 31: Identifying Continuity Between Climate Control Unit A (40P) And Recirculation Control Motor 7P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the recirculation control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 35,36, and 38 terminals individually.

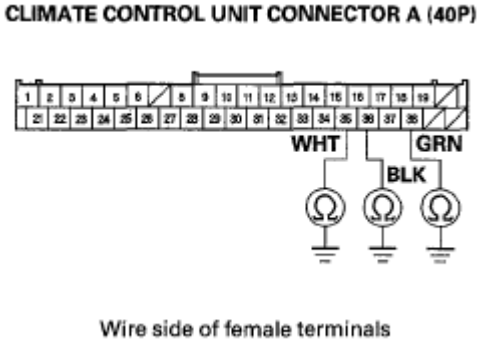


Fig. 32: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 35,36, And 38 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the recirculation control motor.

NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) terminals as follows.

TERMINALS REFERENCE CHART

From terminal	To terminals
35	36, 38
36	38

Is there continuity between any of the terminals?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Reconnect climate control unit connector A (40 P).
13. Turn the ignition switch to ON (II), and check the same terminals for voltage to body ground.

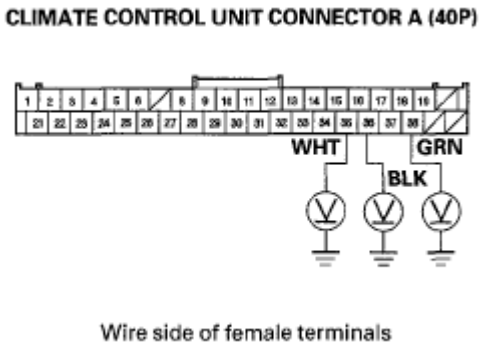


Fig. 33: Identifying Same Terminals For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s) between the climate control unit and the recirculation control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Check for loose wires or poor connections at climate control unit connector A (40P) and at the recirculation control motor 7P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1223 OR DTC INDICATOR M: A PROBLEM IN THE REAR BLOWER MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).

3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1223 or M indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the rear blower motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Check the No. 2 (RR BLOWER) (30 A) fuse in the under-hood fuse box, and the No. 30 (10 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 7.

   NO - Replace the fuse(s), and recheck. If fuse(s) blow again, check for a short in the No. 2 (RR BLOWER) (30 A) and No. 30 (10 A) fuse(s) circuit.

7. Connect the rear blower motor 2P connector No. 2 terminal to body ground with a jumper wire.

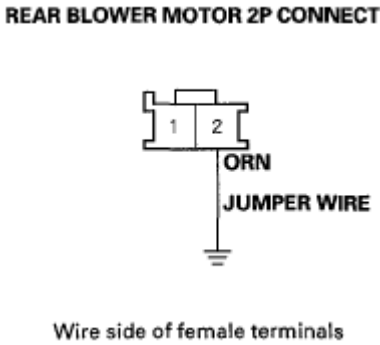


Fig. 34: Identifying Rear Blower Motor 2P Connector No. 2 Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch to ON (II).

   Does the rear blower motor run at high speed?

   YES - Go to step 9.

   NO - Go to step 24.

9. Turn the ignition switch to LOCK (0).

10. Disconnect the jumper wire.
11. Disconnect the rear power transistor 4P connector.
12. Check for continuity between the rear power transistor 4P connector No. 2 terminal and body ground.

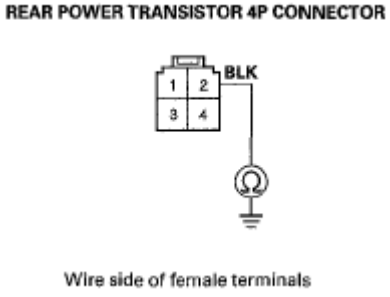


Fig. 35: Identifying Continuity Between Rear Power Transistor 4P Connector No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 13.

NO - Check for an open in the wire between the rear power transistor and body ground. If the wire is OK, check for poor ground at G503 (see **GROUND TO COMPONENTS INDEX**).

13. Connect the rear power transistor 4P connector No. 2 and No. 4 terminals with a jumper wire.

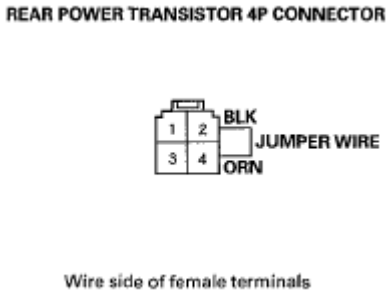


Fig. 36: Identifying Rear Power Transistor 4P Connector No. 2 And No. 4 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Turn the ignition switch to ON (II).

Does the rear blower motor run at high speed?

YES - Go to step 15.

NO - Repair open in the ORN wire between the rear power transistor and the rear blower motor.

15. Turn the ignition switch to LOCK (0).
16. Disconnect the jumper wire.
17. Disconnect climate control unit connector B (14P).
18. Check for continuity between body ground and climate control unit connector B (14P) No. 13 and No. 14 terminals individually.

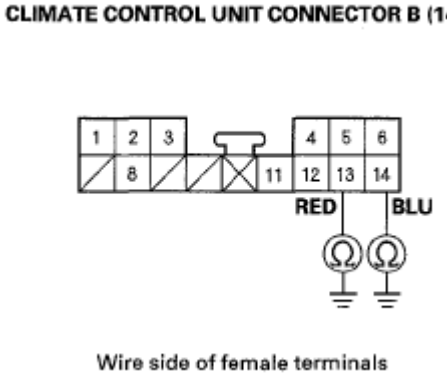


Fig. 37: Identifying Continuity Between Body Ground And Climate Control Unit Connector B (14P) No. 13 And No. 14 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the rear power transistor.

NO - Go to step 19.

19. Check for continuity between the following terminals of climate control unit connector B (14P) and the rear power transistor 4P connector.

14P	4P
No. 13	No. 3
No. 14	No. 1

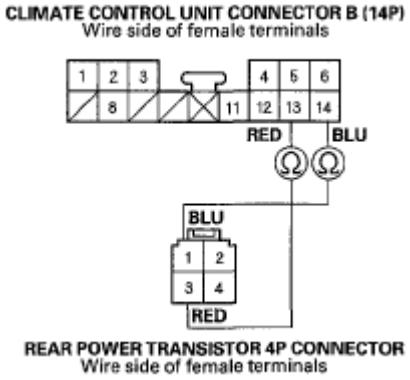


Fig. 38: Identifying Continuity Between Climate Control Unit B (14P) And Rear Power Transistor 4P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 20.

NO - Repair open in the wire(s) between the climate control unit and the rear power transistor.

20. Turn the ignition switch to ON (II).
21. Measure the voltage between body ground and climate control unit connector B (14P) No. 13 and No. 14 terminals individually.

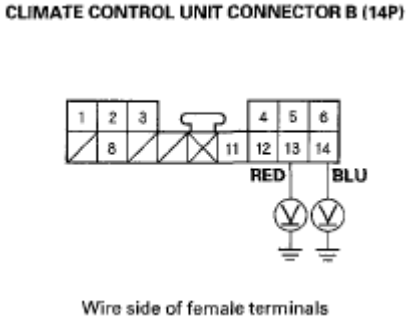


Fig. 39: Measuring Voltage Between Body Ground And Climate Control Unit Connector B (14P) No. 13 And No. 14 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s).

NO - Go to step 22.

22. Reconnect climate control unit connector B (14P).

23. Test the rear power transistor (see **REAR POWER TRANSISTOR TEST**).

    Is the rear power transistor OK?

    YES - Check for loose wires or poor connections at climate control unit connector B (14P) and at the rear power transistor 4P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

    NO - Replace the rear power transistor (see **REAR POWER TRANSISTOR TEST**).

24. Disconnect the jumper wire.
25. Disconnect the rear blower motor 2P connector.
26. Measure the voltage between the rear blower motor 2P connector No. 1 terminal and body ground.

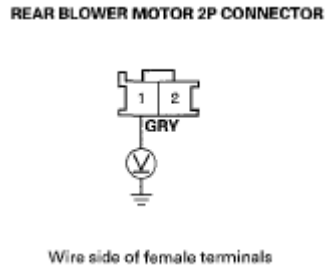


Fig. 40: Measuring Voltage Between Rear Blower Motor 2P Connector No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

    Is there battery voltage?

    YES - Replace the rear blower motor (see **REAR CLIMATE CONTROL PANEL REMOVAL/INSTALLATION**).

    NO - Go to step 27.

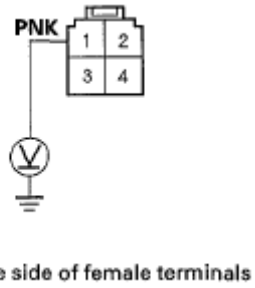
27. Turn the ignition switch to LOCK (0).
28. Remove the rear blower motor relay from the dashboard wire harness, and test it (see **POWER RELAY TEST**).

    Is the relay OK?

    YES - Go to step 29.

    NO - Replace the rear blower motor relay.

29. Measure the voltage between the rear blower motor relay 4P socket No. 1 terminal and body ground.



Wire side of female terminals

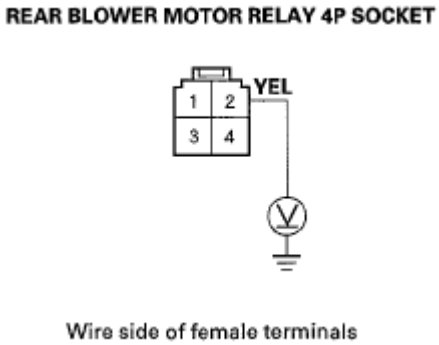
Fig. 41: Measuring Voltage Between Rear Blower Motor Relay 4P Socket No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 30.

NO - Repair open in the wire between the No. 2 (RR BLOWER) (30 A) in the under-hood fuse box and the rear blower motor relay.

30. Turn the ignition switch to ON (II).
31. Measure the voltage between the rear blower motor relay 4P socket No. 2 terminal and body ground.



Wire side of female terminals

Fig. 42: Measuring Voltage Between Rear Blower Motor Relay 4P Socket No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 32.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the rear blower motor relay.

32. Turn the ignition switch to LOCK (0).
33. Check for continuity between the rear blower motor relay 4P socket No. 4 terminal and body ground.

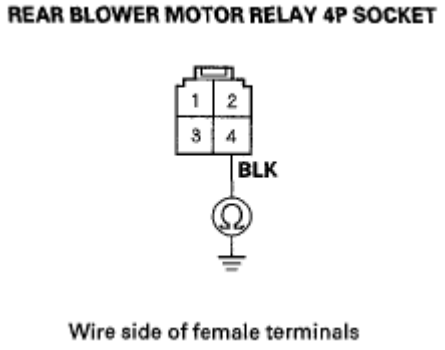


Fig. 43: Identifying Continuity Between Rear Blower Motor Relay 4P Socket No. 4 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the GRY wire between the rear blower motor relay and the blower motor.

NO - Check for an open in the wire between the rear blower motor relay and body ground. If the wire is OK, check for poor ground at G503 (see **GROUND TO COMPONENTS INDEX**).

DTC B1225 OR DTC INDICATOR A AND AUTO: AN OPEN IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1225 or A and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the in-car temperature sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR TEST**).

   Is the in-car temperature sensor OK?

YES - Go to step 7.

NO - Replace the humidity/in-car temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 5 terminal and the humidity/in-car temperature sensor 4P connector No. 4 terminal.

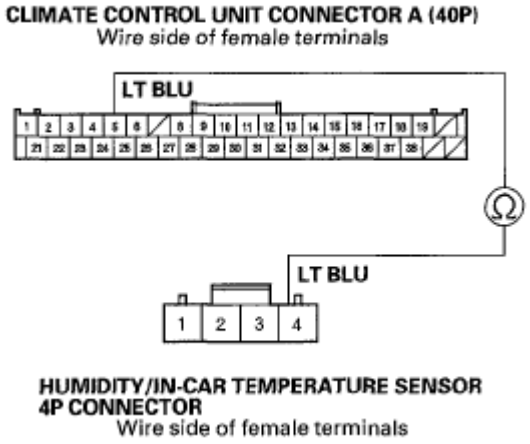


Fig. 44: Identifying Continuity Between No. 5 And Humidity/In-Car Temperature Sensor 4P Connector No. 4 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the in-car temperature sensor.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and the humidity/in-car temperature sensor 4P connector No. 3 terminal.

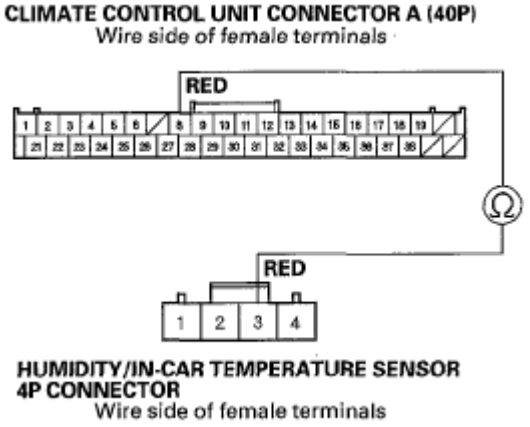


Fig. 45: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 3 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the humidity/in-car temperature sensor 4P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire between the climate control unit and the in-car temperature sensor.

DTC B1226 OR DTC INDICATOR B AND AUTO: A SHORT IN THE IN-CAR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1226 or B and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR TEST**).

   Is the in-car temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the humidity/in-car temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 5 terminal and body ground.

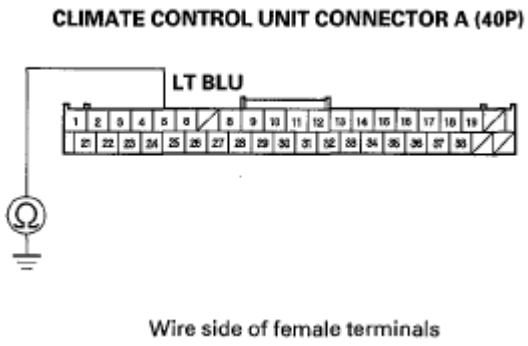


Fig. 46: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 5 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the in-car temperature sensor.

NO - Go to step 9.

9. Check for continuity between climate control unit connector A (40P) No. 5 and No. 8 terminals.

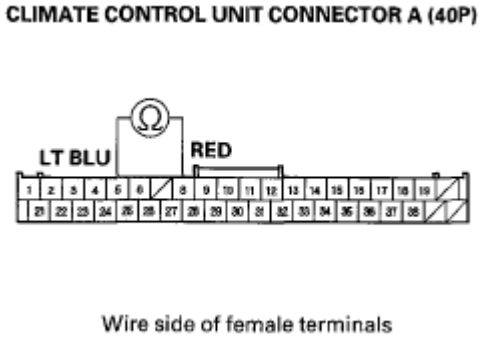


Fig. 47: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 5 And No. 8 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the in-car temperature sensor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1227 OR DTC INDICATOR C AND AUTO: AN OPEN IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1227 or C and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the outside air temperature sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

   Is the outside air temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the outside air temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 28 terminal and the outside air temperature sensor 2P connector No. 2 terminal.

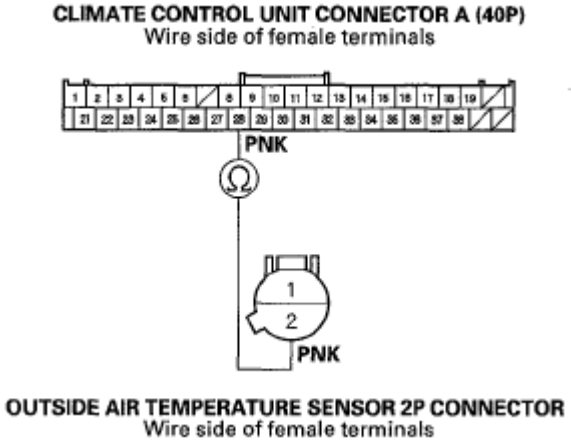


Fig. 48: Identifying Continuity Between No. 28 And Outside Air Temperature Sensor 2P Connector No. 2 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the outside air temperature sensor.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and the outside air temperature sensor 2P connector terminal No. 1.

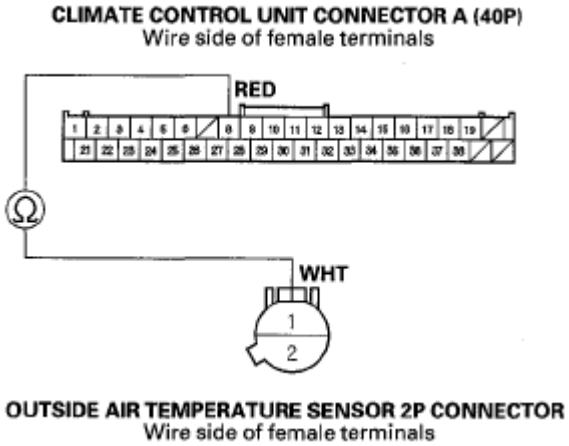


Fig. 49: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And Terminal No. 1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the outside air temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire between the climate control unit and the outside air temperature sensor.

DTC B1228 OR DTC INDICATOR D AND AUTO: A SHORT IN THE OUTSIDE AIR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1228 or D and AUTO indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **OUTSIDE AIR TEMPERATURE SENSOR TEST**).

   Is the outside air temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the outside air temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 28 terminal and body ground.

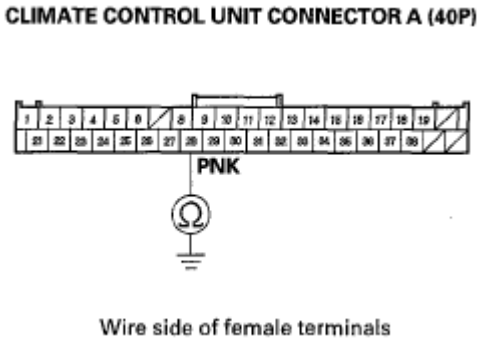


Fig. 50: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 28 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the outside air temperature sensor.

NO - Go to step 9.

9. Check for continuity between climate control unit connector A (40P) No. 8 and No. 28 terminals.

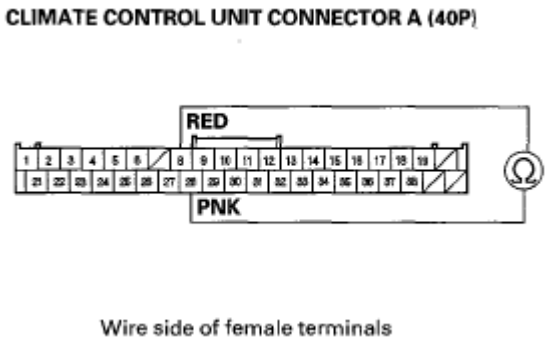


Fig. 51: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 28 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the outside air temperature sensor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1229 OR DTC INDICATOR E AND AUTO: AN OPEN IN THE SUNLIGHT SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1229 or E and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the sunlight sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Disconnect the sunlight sensor 5P connector.
7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 29 terminal and the sunlight sensor 5P connector No. 4 terminal.

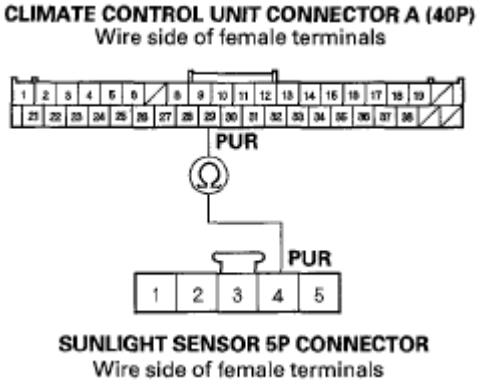


Fig. 52: Identifying Continuity Between No. 29 And Sunlight Sensor 5P Connector No. 4 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the sunlight sensor.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and the sunlight sensor 5P connector No. 2 terminal.

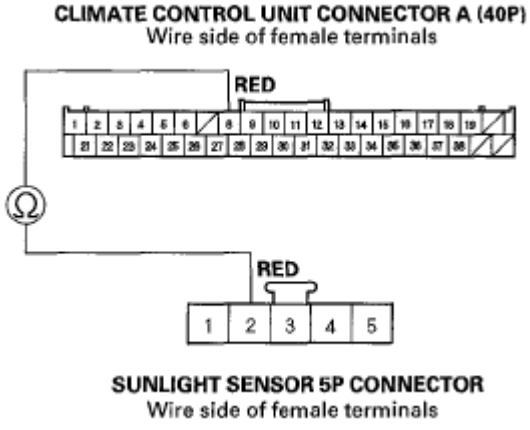


Fig. 53: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 2 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire between the climate control unit and the sunlight sensor.

10. Reconnect the sunlight sensor 5P connector.

11. Reconnect climate control unit connector A (40P).
12. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the sunlight sensor 5P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

DTC B1230 OR DTC INDICATOR F AND AUTO: A SHORT IN THE SUNLIGHT SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1230 or F and AUTO indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Disconnect the sunlight sensor 5P connector.
7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 29 terminal and body ground.

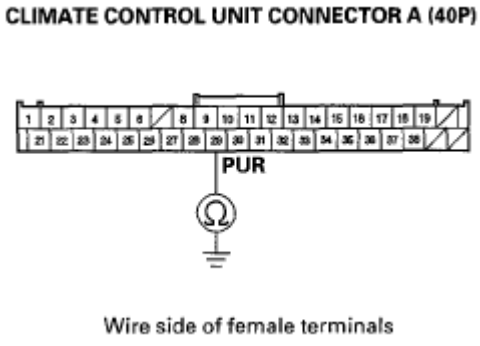


Fig. 54: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 29 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the sunlight sensor.

NO - Go to step 9.

9. Check for continuity between climate control unit connector A (40P) No. 8 and No. 29 terminals.

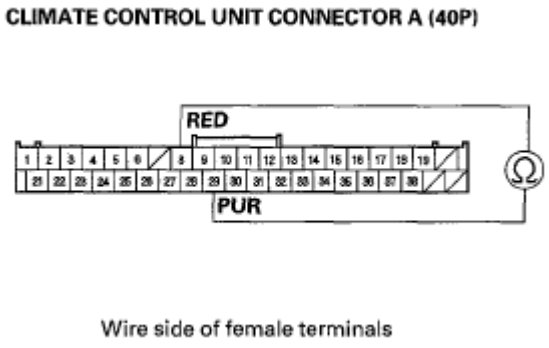


Fig. 55: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 29 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the sunlight sensor.

NO - Go to step 10.

10. Reconnect the sunlight sensor 5P connector.
11. Reconnect climate control unit connector A (40P).
12. Test the sunlight sensor (see **SUNLIGHT SENSOR TEST**).

Is the sunlight sensor OK?

YES - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

DTC B1231 OR DTC INDICATOR G AND AUTO: AN OPEN IN THE FRONT EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**

WITH THE HDS) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).

4. Check for DTCs.

   Is DTC B1231 or G and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the front evaporator temperature sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Remove the front evaporator temperature sensor (see **FRONT EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **FRONT EVAPORATOR TEMPERATURE SENSOR TEST**).

   Is the front evaporator temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the front evaporator temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 24 terminal and the front evaporator temperature sensor 2P connector No. 2 terminal.

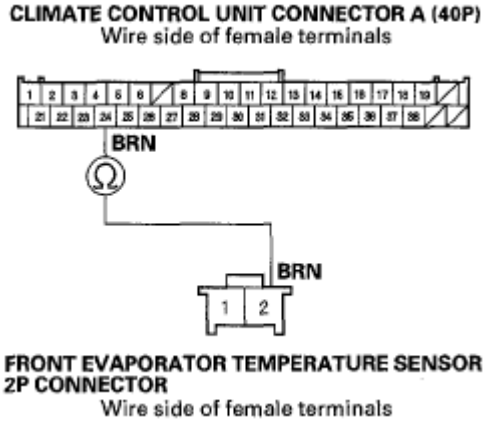


Fig. 56: Identifying Continuity Between No. 24 And Front Evaporator Temperature Sensor 2P Connector No. 2 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the front evaporator temperature sensor.

9. Check for continuity between climate control unit connector A (40P) No. 8 terminal and the front evaporator temperature sensor 2P connector No. 1 terminal.

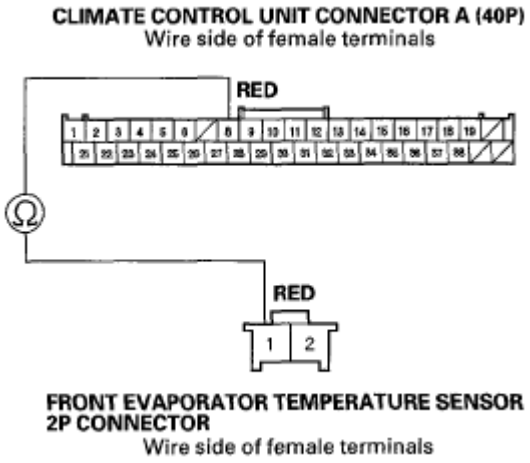


Fig. 57: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 1 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the front evaporator temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Repair open in the wire between the climate control unit and the front evaporator temperature sensor.

DTC B1232 OR DTC INDICATOR H AND AUTO: A SHORT IN THE FRONT EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1232 or H and AUTO indicated?

YES - Go to step 5.

NO - Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Remove the front evaporator temperature sensor (see **FRONT EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **FRONT EVAPORATOR TEMPERATURE SENSOR TEST**).

   Is the front evaporator temperature sensor OK?

   YES - Go to step 7.

   NO - Replace the front evaporator temperature sensor.

7. Disconnect climate control unit connector A (40P).
8. Check for continuity between climate control unit connector A (40P) No. 24 terminal and body ground.

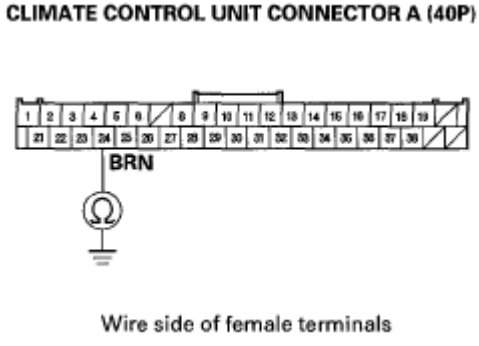


Fig. 58: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 24 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the front evaporator temperature sensor.

NO - Go to step 9.

9. Check for continuity between climate control unit connector A (40P) No. 8 and No. 24 terminals.

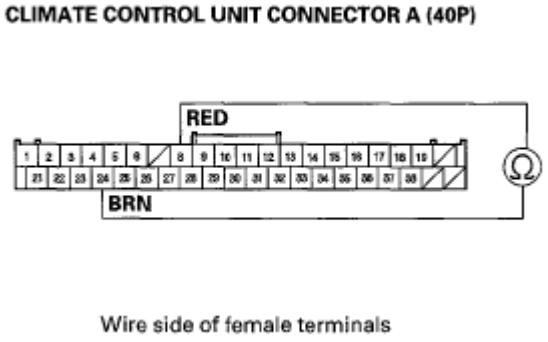


Fig. 59: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 8 And No. 24 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the front evaporator temperature sensor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1233 OR DTC INDICATOR J AND AUTO: AN OPEN IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1233 or J and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the driver's air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

   Is the driver's air mix control motor OK?

   YES - Go to step 7.

NO - Replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

7. Disconnect the driver's air mix control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the driver's air mix control motor 7P connector.

40P	7P
No. 6	No. 7
No. 8	No. 5
No. 11	No. 3

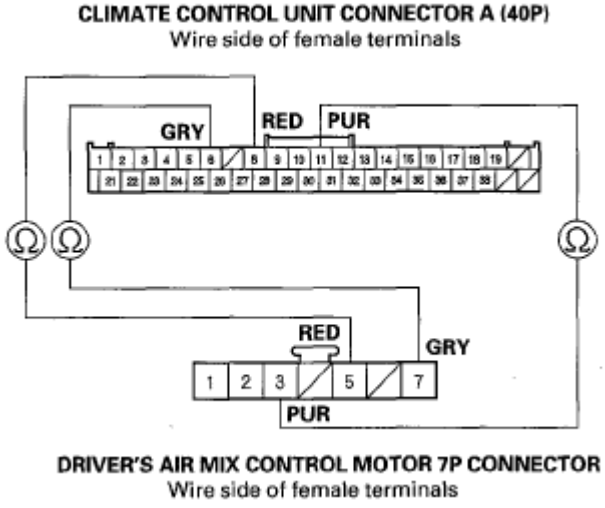


Fig. 60: Identifying Continuity Between Climate Control Unit A (40P) And Driver's Air Mix Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the driver's air mix control motor 7P connector. If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire(s) between the climate control unit and the driver's air mix control motor.

DTC B1234 OR DTC INDICATOR K AND AUTO: A SHORT IN THE DRIVER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).

3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1234 or K and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Check for DTCs.

   Are these DTCs also present; B1237 or N and AUTO, and/or B1245 or G, and/or B2968 or A and WINDSHIELD DEFROST, and/or B2980 or B and WINDSHIELD DEFROST?

   YES - Go to step 13.

   NO - Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

   Is the driver's air mix control motor OK?

   YES - Go to step 8.

   NO - Replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

8. Disconnect the driver's air mix control motor 7P connector.
9. Disconnect climate control unit connector A (40P).
10. Check for continuity between body ground and climate control unit connector A (40P) No. 11 terminal.

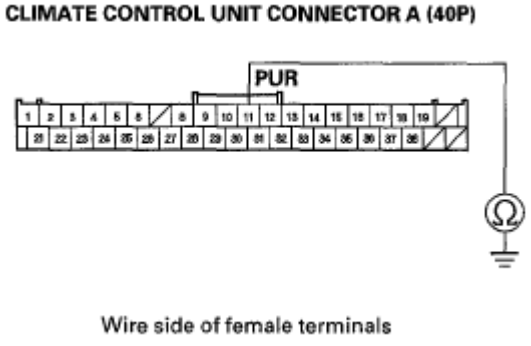


Fig. 61: Identifying Continuity Between Body Ground And Climate Control Unit Connector A

(40P) No. 11 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the driver's air mix control motor.

NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) No. 6 and No. 11 terminals.

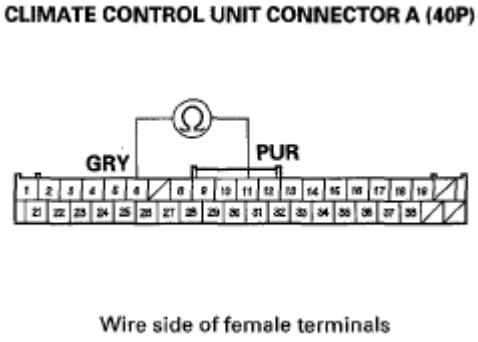


Fig. 62: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 And No. 11 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 11 terminal and body ground.

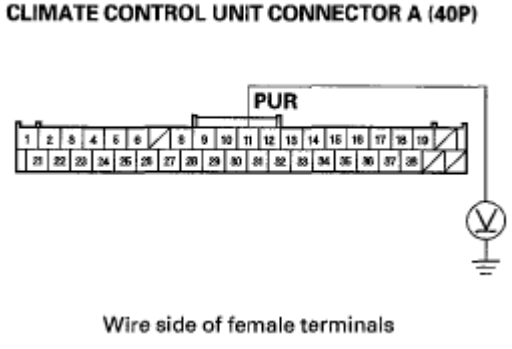


Fig. 63: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 11 Terminal And

Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire between the climate control unit and the driver's air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

13. Turn the ignition switch to LOCK (0), and disconnect the climate control unit.
14. Disconnect these items:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor
15. Check for continuity between climate control unit connector A (40P) No. 6 terminal and body ground.

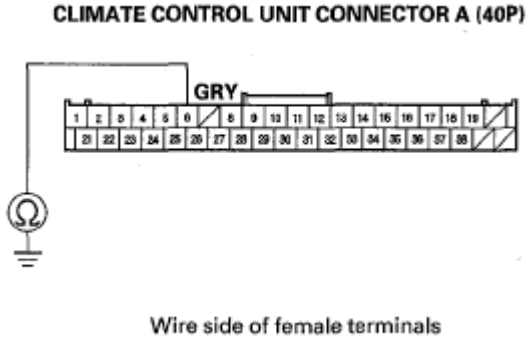


Fig. 64: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire.

NO - Go to step 16.

16. Turn the ignition switch to ON (II), and check the same terminal for voltage to body ground.

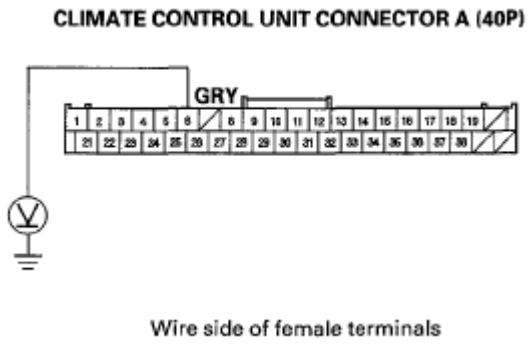


Fig. 65: Identifying Same Terminal For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire. This short may have also damaged the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 17.

17. Turn the ignition switch to LOCK (0).
18. Reconnect the climate control unit connector (40P).
19. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 6 terminal and body ground.

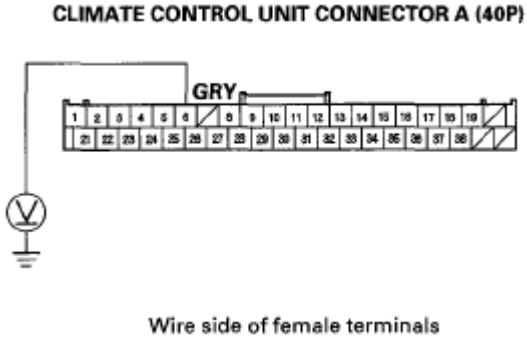


Fig. 66: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 20.

NO - Check for a loose wire or poor connection at climate control unit connector A (40P). If the connection is good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

20. While checking the same terminal for voltage to ground, reconnect these items individually and note the voltage reading each time:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor

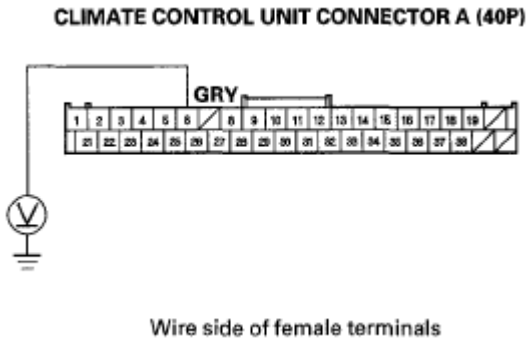


Fig. 67: Identifying Climate Control Unit Connector A (40P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage remain at about 5 V?

YES - Substitute a known-good climate control unit and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the component that caused the voltage drop.

DTC B1235 OR DTC INDICATOR L AND AUTO: A PROBLEM IN THE DRIVER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1235 or L and AUTO indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the driver's air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR TEST**).

   Is the driver's air mix control motor OK?

   YES - Go to step 7.

   NO - Replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**), or repair the driver's air mix control linkage or door.

7. Disconnect the driver's air mix control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the driver's air mix control motor 7P connector.

40P	7P
No. 12	No. 2
No. 13	No. 1

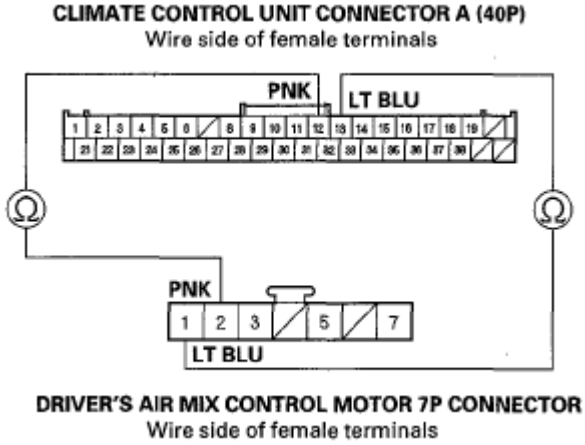


Fig. 68: Identifying Continuity Between Climate Control Unit A (40P) And Driver's Air Mix Control Motor 7P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the driver's air mix control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 12 and No. 13 terminals individually.

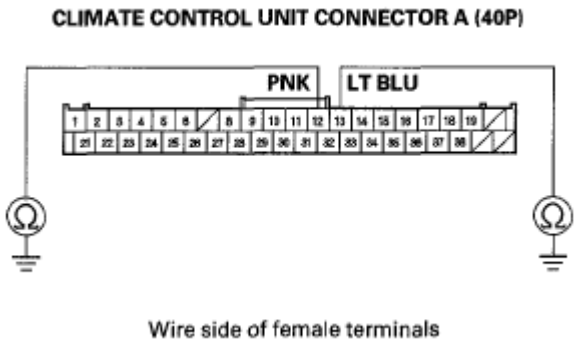


Fig. 69: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 12 And No. 13 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the driver's air mix control motor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1236 OR DTC INDICATOR M AND AUTO: AN OPEN IN THE PASSENGER'S AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1236 or M and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the passenger's air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

   Is the passenger's air mix control motor OK?

YES - Go to step 7.

NO - Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

7. Disconnect the passenger's air mix control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the passenger's air mix control motor 7P connector.

40P	7P
No. 6	No. 7
No. 8	No. 5
No. 30	No. 3

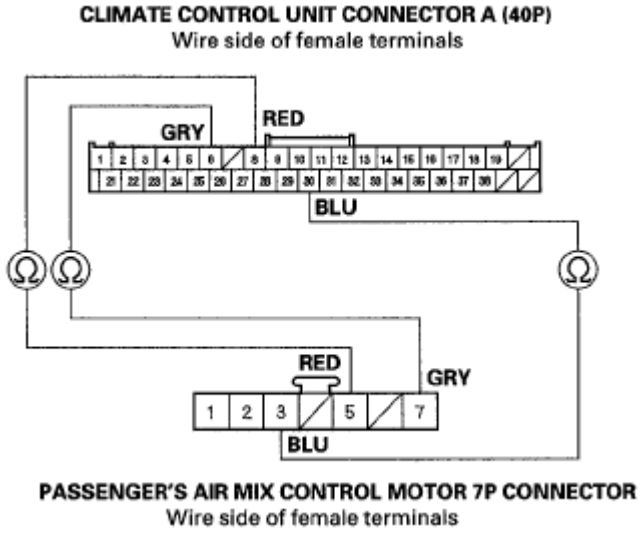


Fig. 70: Identifying Continuity Between Climate Control Unit A (40P) And Passenger's Air Mix Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the passenger's air mix control motor 7P connector. If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire(s) between the climate control unit and the passenger's air mix control motor.

DTC B1237 OR DTC INDICATOR N AND AUTO: A SHORT IN THE PASSENGER'S AIR MIX

CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1237 or N and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Check for DTCs.

   Are these DTCs also present; B1234 or K and AUTO, and/or B1245 or G, and/or B2968 or A and WINDSHIELD DEFROST, and/or B2980 or B and WINDSHIELD DEFROST?

   YES - Go to step 13.

   NO - Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

   Is the passenger's air mix control motor OK?

   YES - Go to step 8.

   NO - Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

8. Disconnect the passenger's air mix control motor 7P connector.
9. Disconnect climate control unit connector A (40P).
10. Check for continuity between body ground and climate control unit connector A (40P) No. 30 terminal.

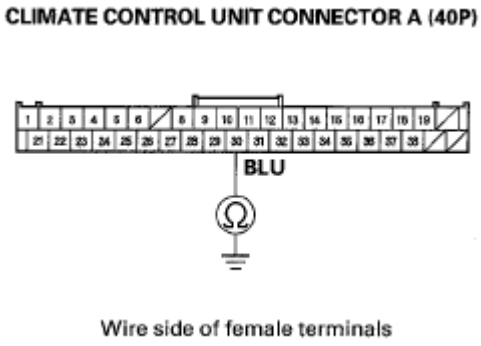


Fig. 71: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 30 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the passenger's air mix control motor.

NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) No. 6 and No. 30 terminals.

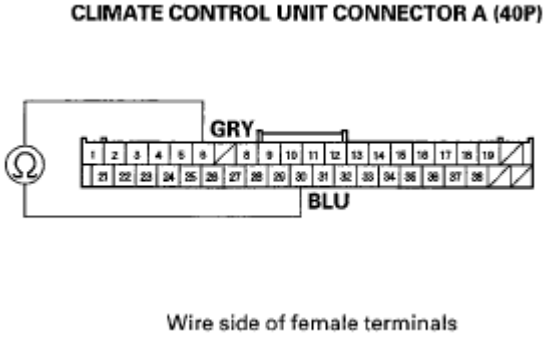


Fig. 72: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 And No. 30 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 30 terminal and body ground.

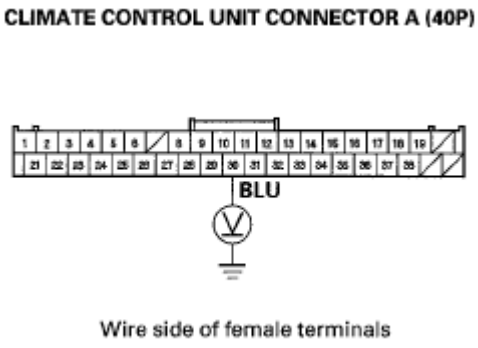


Fig. 73: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 30 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s) between the climate control unit and the passenger's air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

13. Turn the ignition switch to LOCK (0), and disconnect the climate control unit.
14. Disconnect these items:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor
15. Check for continuity between climate control unit connector A (40P) No. 6 terminal and body ground.

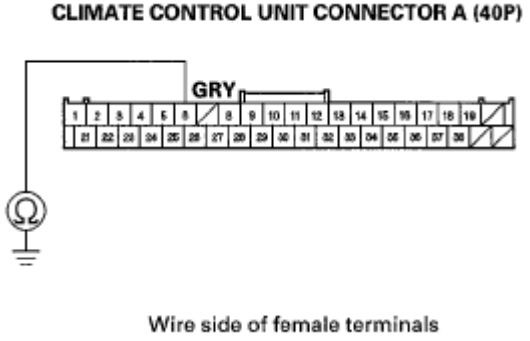


Fig. 74: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire.

NO - Go to step 16.

16. Turn the ignition switch to ON (II), and check the same terminal for voltage to body ground.

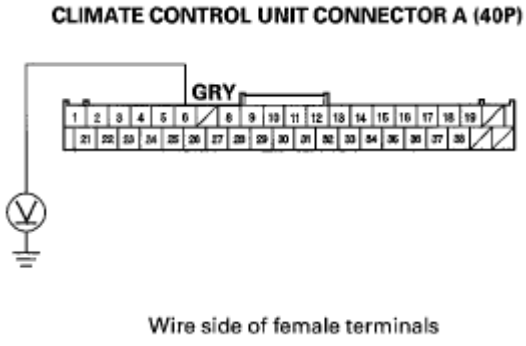


Fig. 75: Identifying Same Terminal For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire. This short may have also damaged the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 17.

17. Turn the ignition switch to LOCK (0).
18. Reconnect the climate control unit connector (40P).
19. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 6 terminal and body ground.

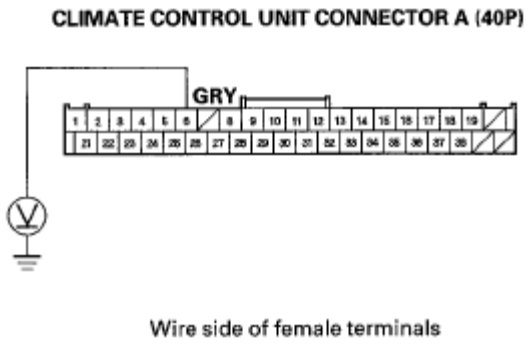


Fig. 76: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 20.

NO - Check for a loose wire or poor connection at climate control unit connector A (40P). If the connection is good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

20. While checking the same terminal for voltage to ground, reconnect these items individually and note the voltage reading each time:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor

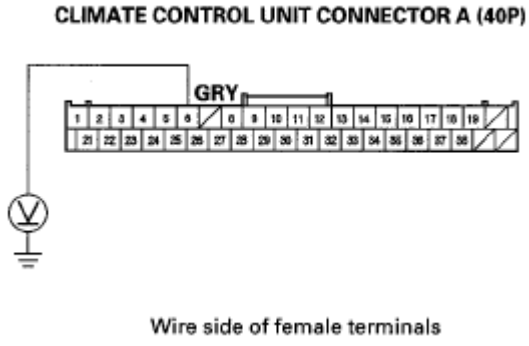


Fig. 77: Identifying Same Terminal For Voltage To Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage remain at about 5 V?

YES - Substitute a known-good climate control unit and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the component that caused the voltage drop.

DTC B1238 OR DTC INDICATOR P AND AUTO: A PROBLEM IN THE PASSENGER'S AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).

4. Check for DTCs.

   Is DTC B1238 or P and AUTO indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the passenger's air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR TEST**).

   Is the passenger's air mix control motor OK?

   YES - Go to step 7.

   NO - Replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**), or repair the passenger's air mix control linkage or door.

7. Disconnect the passenger's air mix control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the passenger's air mix control motor 7P connector.

40P	7P
No. 14	No. 2
No. 15	No. 1

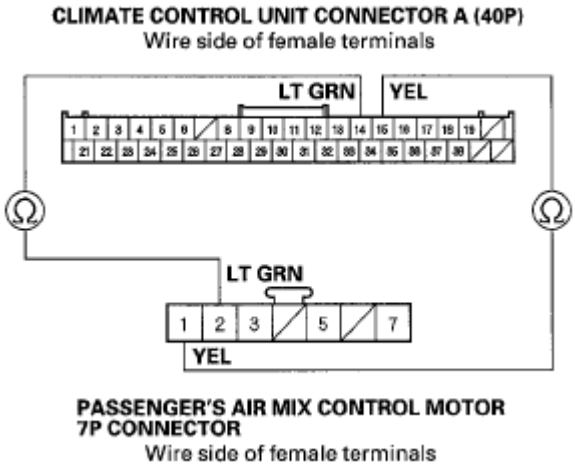


Fig. 78: Identifying Continuity Between Climate Control Unit A (40P) And Passenger's Air Mix Control Motor 7P Connector Terminal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the passenger's air mix control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 14 and No. 15 terminals individually.

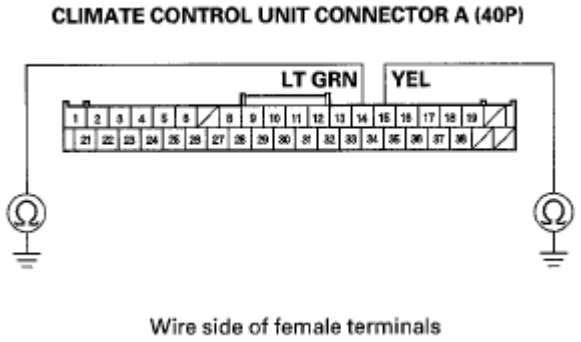


Fig. 79: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 14 And No. 15 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the passenger's air mix control motor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1239 OR DTC INDICATOR A: AN OPEN OR SHORT IN THE FRONT MODE CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1239 or A indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the front mode control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the front mode control motor (see **FRONT MODE CONTROL MOTOR TEST**).

   Is the front mode control motor OK?

   YES - Go to step 7.

   NO - Replace the front mode control motor (see **FRONT MODE CONTROL MOTOR REPLACEMENT**).

7. Disconnect the front mode control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the front mode control motor 7P connector.

40P	7P
No. 8	No. 7
No. 31	No. 6
No. 32	No. 5
No. 33	No. 4
No. 34	No. 3

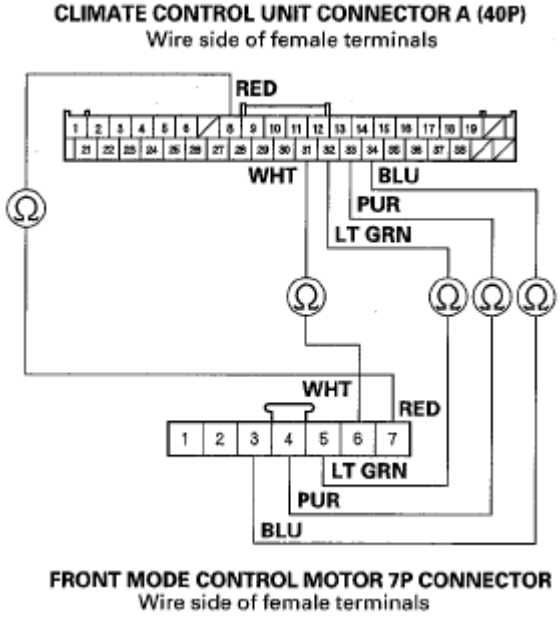


Fig. 80: Identifying Continuity Between Climate Control Unit A (40P) And Front Mode Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the front mode control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 31,32, 33, and 34 terminals individually.

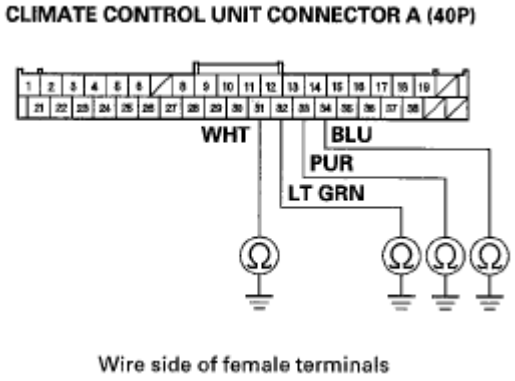


Fig. 81: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 31,32, 33, And 34 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the front mode control motor.

NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) terminals as follows.

TERMINALS REFERENCE CHART

From terminal	To terminals
31	32, 33, 34
32	33, 34
33	34

Is there continuity between any of the terminals?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), and check the same terminals for voltage to body ground.

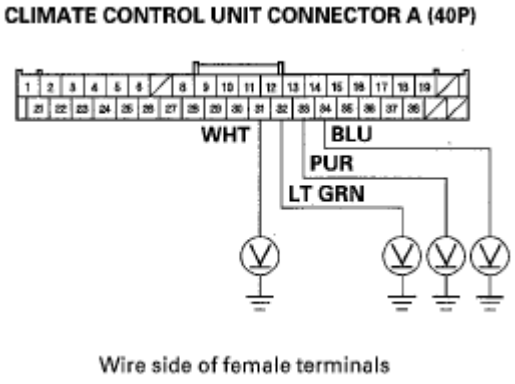


Fig. 82: Identifying Same Terminals For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s) between the climate control unit and the front mode control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Check for loose wires or poor connections at climate control unit connector A (40P) and at the front mode control motor 7P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

DTC B1240 OR DTC INDICATOR B: A PROBLEM IN THE FRONT MODE CONTROL LINKAGE, DOORS, OR MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1240 or B indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the mode control motor circuit.

5. Turn the ignition switch to LOCK (0).

6. Test the front mode control motor (see **FRONT MODE CONTROL MOTOR TEST**).

   Is the front mode control motor OK?

   YES - Go to step 7.

   NO - Replace the front mode control motor (see **FRONT MODE CONTROL MOTOR REPLACEMENT**), or repair the front mode control linkage or doors.

7. Disconnect the front mode control motor 7P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the front mode control motor 7P connector.

40P	7P
No. 16	No. 2
No. 17	No. 1

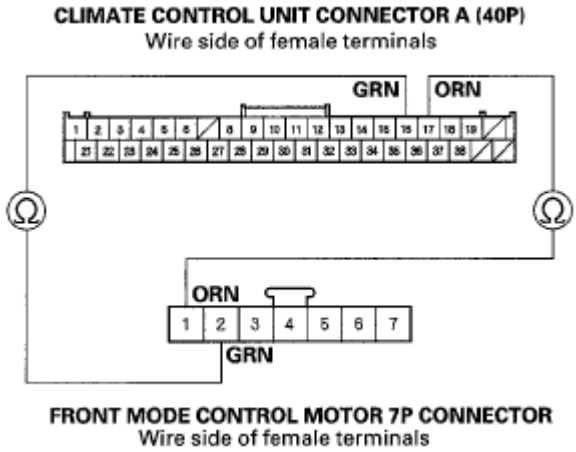


Fig. 83: Identifying Continuity Between Climate Control Unit A (40P) And Front Mode Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the front mode control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 16 and No. 17 terminals individually.

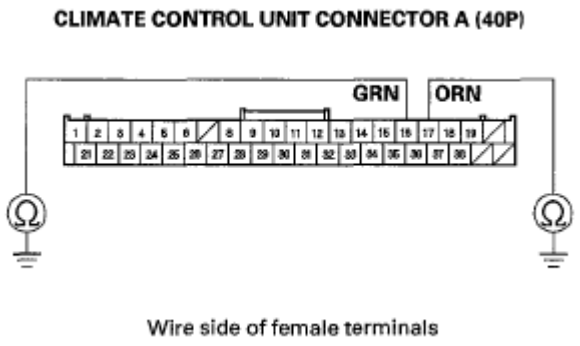


Fig. 84: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 16 And No. 17 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the front mode control motor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B1241 OR DTC INDICATOR C: A PROBLEM IN THE FRONT BLOWER MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1241 or C indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the front blower motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Check the No. 12 (40 A) fuse in the relay block, and the No. 30 (10 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 7.

   NO - Replace the fuse(s), and recheck. If fuse(s) blow again, check for a short in the No. 12 (40 A) and

No. 30 (10 A)fuse(s) circuit.

7. Connect the front blower motor 2P connector No. 2 terminal to body ground with a jumper wire.

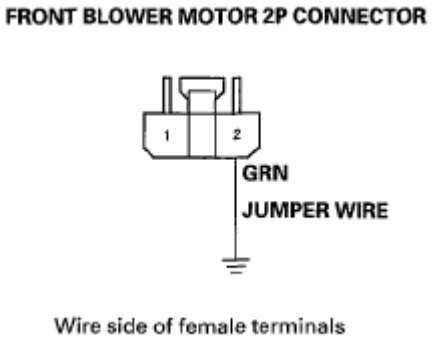


Fig. 85: Identifying Front Blower Motor 2P Connector No. 2 Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch to ON (II).

   Does the front blower motor run at high speed?

   YES - Go to step 9.

   NO - Go to step 24.

9. Turn the ignition switch to LOCK (0).
10. Disconnect the jumper wire.
11. Disconnect the front power transistor 4P connector.
12. Check for continuity between the front power transistor 4P connector No. 2 terminal and body ground.

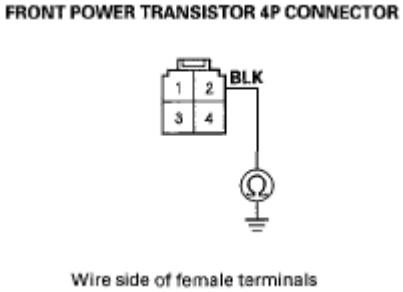


Fig. 86: Identifying Continuity Between Front Power Transistor 4P Connector No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 13.

NO - Check for an open in the wire between the front power transistor and body ground. If the wire is OK, check for poor ground at G507 (see **GROUND TO COMPONENTS INDEX**).

13. Connect the front power transistor 4P connector No. 2 and No. 4 terminals with a jumper wire.

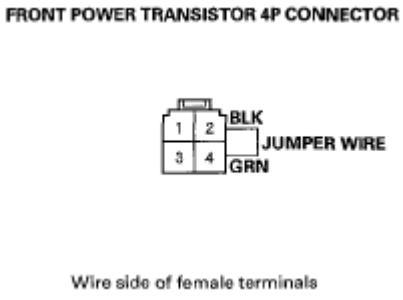


Fig. 87: Identifying Front Power Transistor 4P Connector No. 2 And No. 4 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Turn the ignition switch to ON (II).

Does the front blower motor run at high speed?

YES - Go to step 15.

NO - Repair open in the GRN wire between the front power transistor and the front blower motor.

15. Turn the ignition switch to LOCK (0).
16. Disconnect the jumper wire.
17. Disconnect climate control unit connector A (40P).
18. Check for continuity between body ground and climate control unit connector A (40P) No. 9 and No. 10 terminals individually.

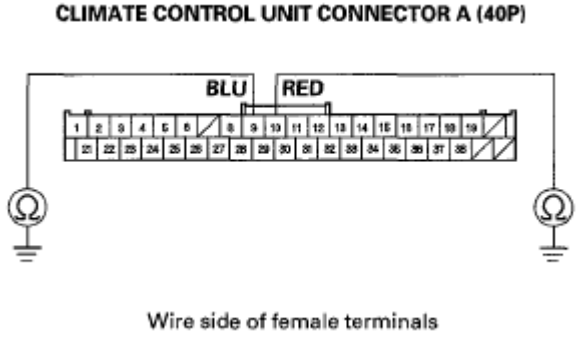


Fig. 88: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 9 And No. 10 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the front power transistor.

NO - Go to step 19.

19. Check for continuity between the following terminals of climate control unit connector A (40P) and the front power transistor 4P connector.

    40P: 4P:

    No. 9 No. 3

    No. 10 No. 1

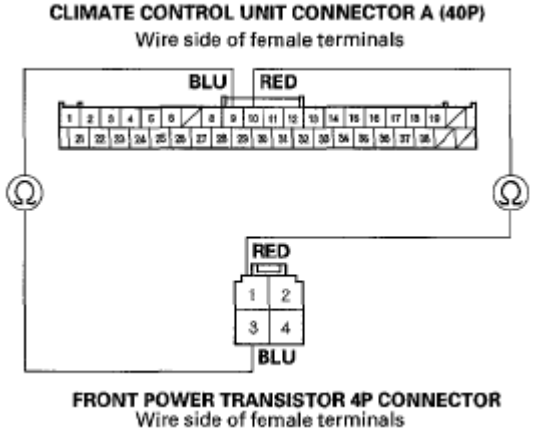


Fig. 89: Identifying Continuity Between Climate Control Unit A (40P) And Front Power Transistor 4P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 20.

NO - Repair open in the wire(s) between the climate control unit and the front power transistor.

20. Turn the ignition switch to ON (II).
21. Measure the voltage between body ground and climate control unit connector A (40P) No. 9 and No. 10 terminals individually.

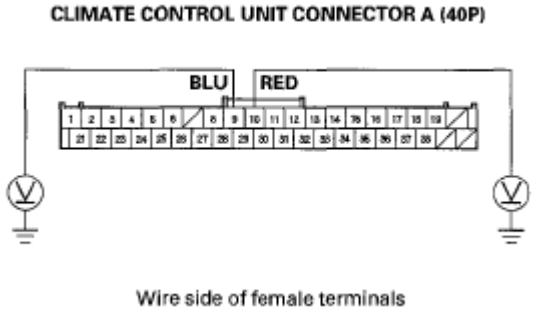


Fig. 90: Measuring Voltage Between Body Ground And Climate Control Unit Connector A (40P) No. 9 And No. 10 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s).

NO - Go to step 22.

22. Reconnect climate control unit connector A (40P).
23. Test the front power transistor (see **FRONT POWER TRANSISTOR TEST**).

Is the front power transistor OK?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the front power transistor 4P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Replace the front power transistor (see **FRONT POWER TRANSISTOR TEST**).

24. Disconnect the jumper wire.
25. Disconnect the front blower motor 2P connector.
26. Measure the voltage between the front blower motor 2P connector No. 1 terminal and body ground.

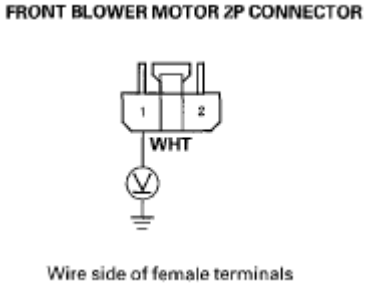


Fig. 91: Measuring Voltage Between Front Blower Motor 2P Connector No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the front blower motor (see **BLOWER UNIT COMPONENT REPLACEMENT**).

NO - Go to step 27.

27. Turn the ignition switch to LOCK (0).
28. Remove the front blower motor relay from the relay block, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES - Go to step 29.

NO - Replace the front blower motor relay.

29. Measure the voltage between the front blower motor relay 4P socket No. 1 terminal and body ground.

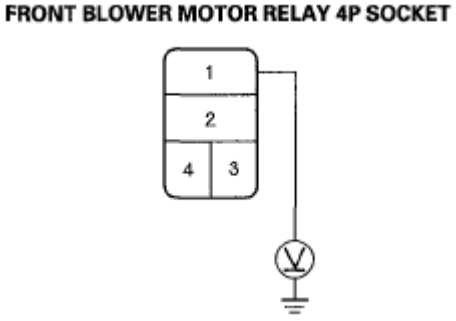


Fig. 92: Measuring Voltage Between Front Blower Motor Relay 4P Socket No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 30.

NO - Replace the under-hood fuse/relay box (see **REMOVAL AND INSTALLATION**).

30. Turn the ignition switch to ON (II).
31. Measure the voltage between the front blower motor relay 4P socket No. 4 terminal and body ground.

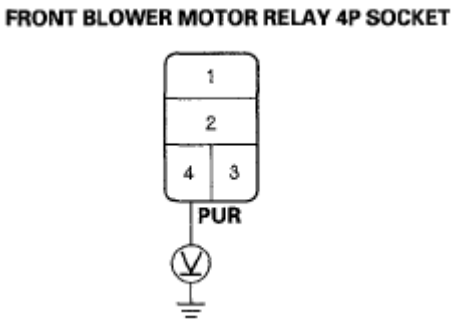


Fig. 93: Measuring Voltage Between Front Blower Motor Relay 4P Socket No. 4 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 32.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the front blower motor relay.

32. Turn the ignition switch to LOCK (0).
33. Check for continuity between the front blower motor relay 4P socket No. 3 terminal and body ground.

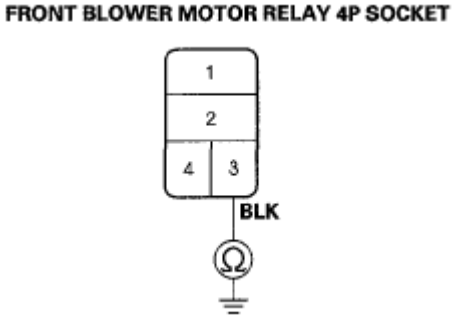


Fig. 94: Identifying Continuity Between Front Blower Motor Relay 4P Socket No. 3 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the WHT wire between the front blower motor relay and the blower motor.

NO - Check for an open in the wire between the front blower motor relay and body ground. If the wire is OK, check for poor ground at G202 (see **GROUND TO COMPONENTS INDEX**).

DTC B1244 OR DTC INDICATOR F: AN OPEN IN THE REAR AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1244 or F indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the rear air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**).

   Is the rear air mix control motor OK?

   YES - Go to step 7.

   NO - Replace the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**).

7. Disconnect the rear air mix control motor 7P connector.
8. Disconnect climate control unit connector A (40P) and B (14P).
9. Check for continuity between the following terminals of climate control unit connector A (40P), B (14P), and the rear air mix control motor 7P connector.

40P	**7P**
No. 6	No. 5
No. 8	No. 7
14P	**7P**
No. 5	No. 3

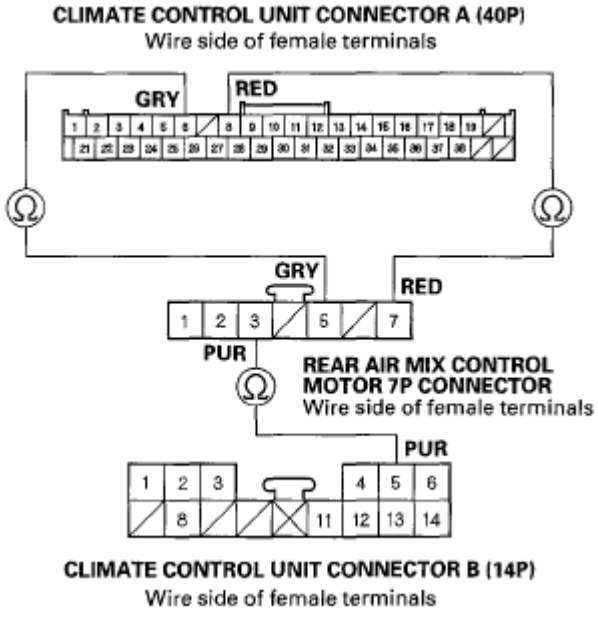


Fig. 95: Identifying Continuity Between Climate Control Unit A (40P), B (14P), And Rear Air Mix Control Motor 7P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P), B (14P), and at the rear air mix control motor 7P connector. If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire(s) between the climate control unit and the rear air mix control motor.

DTC B1245 OR DTC INDICATOR G: A SHORT IN THE REAR AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B1245 or G indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Check for DTCs.

   Are these DTCs also present; B1234 or K and AUTO, and/or B1237 or N and AUTO, and/or B2968 or A and WINDSHIELD DEFROST, and/or B2980 or B and WINDSHIELD DEFROST?

   YES - Go to step 13.

   NO - Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Test the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**).

   Is the rear air mix control motor OK?

   YES - Go to step 8.

   NO - Replace the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**).

8. Disconnect the rear air mix control motor 7P connector.
9. Disconnect climate control unit connector A (40P) and B (HP).
10. Check for continuity between climate control unit connector B (14P) No. 5 terminal and body ground.

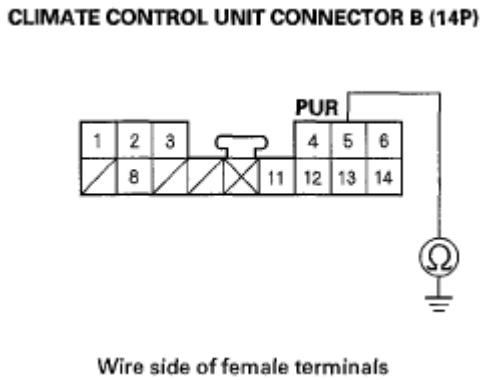


Fig. 96: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 5 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

   Is there continuity?

   YES - Repair short to body ground in the wire between the climate control unit and the rear air mix control motor.

   NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) No. 6 terminal and climate control

unit connector B (14P) No. 5 terminal.

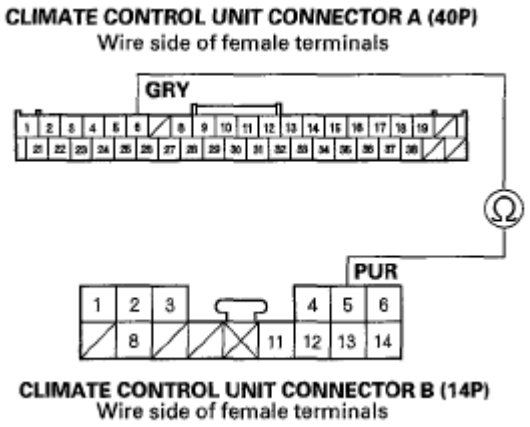

CLIMATE CONTROL UNIT CONNECTOR A (40P)
Wire side of female terminals
GRY
PUR
1 2 3 4 5 6
8 11 12 13 14
CLIMATE CONTROL UNIT CONNECTOR B (14P)
Wire side of female terminals

Fig. 97: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 And No. 5 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector B (14P) No. 5 terminal and body ground.

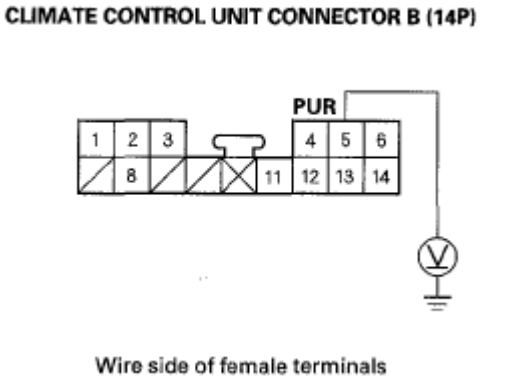


Fig. 98: Measuring Voltage Between Climate Control Unit Connector B (14P) No. 5 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire between the climate control unit and the rear air mix control motor. This short may also damage the climate control unit. Repair the short to power before replacing

the climate control unit.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

13. Turn the ignition switch to LOCK (0), and disconnect climate control unit connector A (40P).
14. Disconnect these items:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor
15. Check for continuity between climate control unit connector A (40P) No. 6 terminal and body ground.

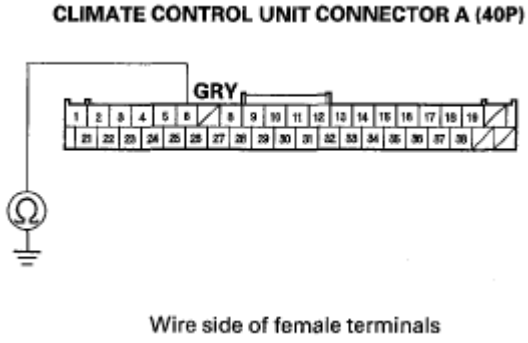


Fig. 99: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire.

NO - Go to step 16.

16. Turn the ignition switch to ON (II), and check the same terminal for voltage to body ground.

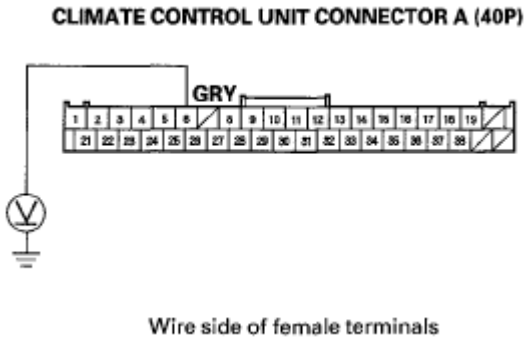


Fig. 100: Identifying Same Terminal For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire. This short may have also damaged the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 17.

17. Turn the ignition switch to LOCK (0).
18. Reconnect the climate control unit connector (40P).
19. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 6 terminal and body ground.

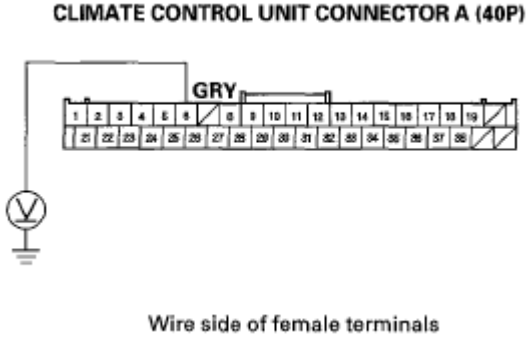


Fig. 101: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 20.

NO - Check for a loose wire or poor connection at climate control unit connector A (40P). If the connection is good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

20. While checking the same terminal for voltage to ground, reconnect these items individually and note the voltage reading each time:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor

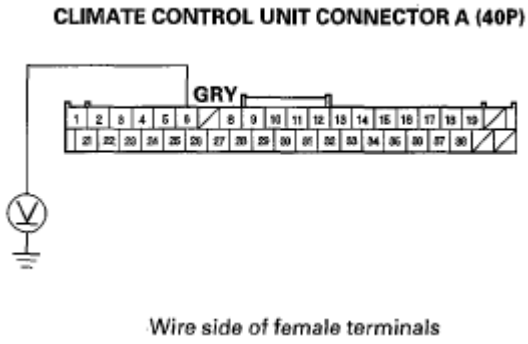


Fig. 102: Identifying Climate Control Unit Connector A (40P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage remain at about 5 V?

YES - Substitute a known-good climate control unit and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the component that caused the voltage drop.

DTC B1246 OR DTC INDICATOR H: A PROBLEM IN THE REAR AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B1246 or H indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the rear air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**).

   Is the rear air mix control motor OK?

   YES - Go to step 7.

   NO - Replace the rear air mix control motor (see **REAR AIR MIX CONTROL MOTOR TEST**), or repair the rear air mix control linkage or door.

7. Disconnect the rear air mix control motor 7P connector.
8. Disconnect climate control unit connector B (14P).
9. Check for continuity between the following terminals of climate control unit connector B (14P) and the rear air mix control motor 7P connector.

14P	7P
No. 1	No. 2
No. 2	No. 1

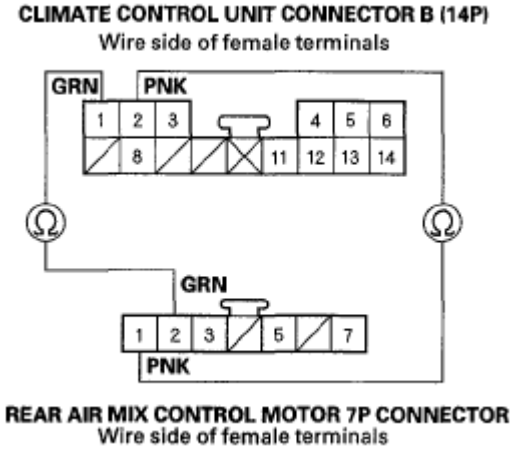


Fig. 103: Identifying Continuity Between Climate Control Unit B (14P) And Rear Air Mix Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the rear air mix control motor.

10. Check for continuity between body ground and climate control unit connector B (14P) No. 1 and No. 2 terminals individually.

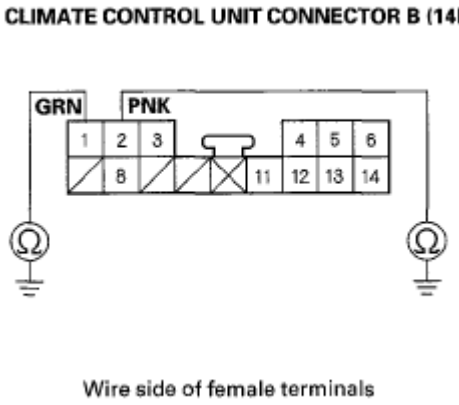


Fig. 104: Identifying Continuity Between Body Ground And Climate Control Unit Connector B (14P) No. 1 And No. 2 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the rear air mix control motor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B2965: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH REAR CLIMATE CONTROL PANEL

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
4. Check for DTCs.

   Is DTC B2965 indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the rear climate control panel and climate control unit circuit.

5. Turn the ignition switch to LOCK (0).
6. Disconnect the rear climate panel 10P connector.
7. Turn the ignition switch to ON (II).
8. Measure the voltage between the rear climate control panel 10P connector No. 1 terminal and body ground.

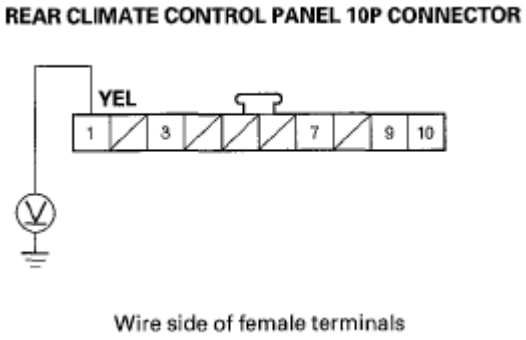


Fig. 105: Measuring Voltage Between Rear Climate Control Panel 10P Connector No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the rear climate control panel.

9. Turn the ignition switch to LOCK (0).
10. Check for continuity between the rear climate control panel 10P connector No. 3 terminal and body ground.

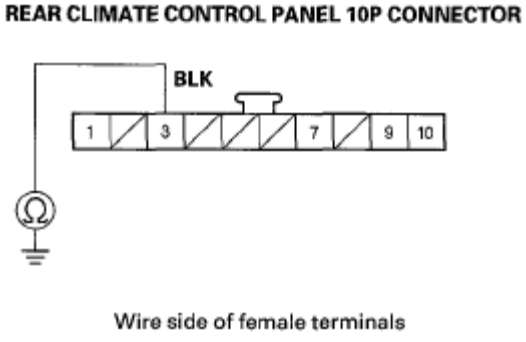


Fig. 106: Identifying Continuity Between Rear Climate Control Panel 10P Connector No. 3 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 11.

NO - Check for an open in the wire between the rear climate control panel and body ground. If the wire is OK, check for poor ground at G506 (see **GROUND TO COMPONENTS INDEX**).

11. Disconnect climate control unit connector B (14P).
12. Check for continuity between the following terminals of climate control unit connector B (14P) and the rear climate control panel 10P connector.

14P	10P
No. 11	No. 10
No. 12	No. 9

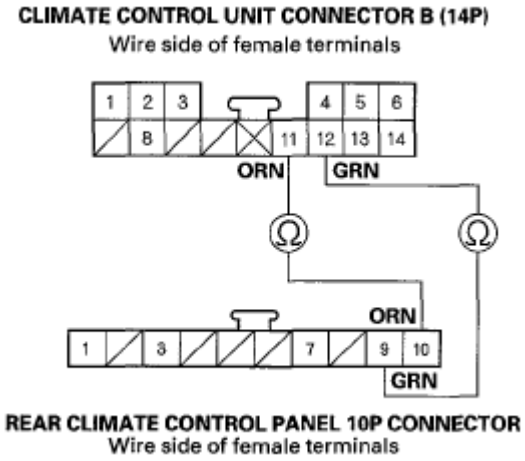


Fig. 107: Identifying Continuity Between Climate Control Unit B (14P) And Rear Climate Control Panel 10P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 13.

NO - Repair open in the wire(s) between the climate control unit and the rear climate control panel.

13. Check for continuity between body ground and climate control unit connector B (14P) No. 11 and No. 12 terminals individually.

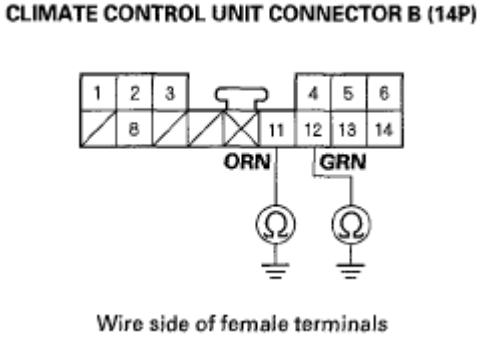


Fig. 108: Identifying Continuity Between Body Ground And Climate Control Unit Connector B

(14P) No. 11 And No. 12 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the rear climate control panel.

NO - Go to step 14.

14. Check for continuity between climate control unit connector B (14P) No. 11 and No. 12 terminals.

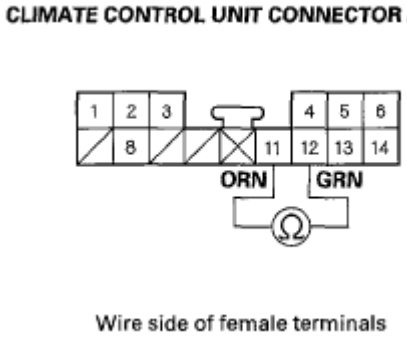


Fig. 109: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 11 And No. 12 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short in the wires between the climate control unit and the rear climate control panel.

NO - Substitute a known-good rear climate control panel, and recheck. If the symptom/indication goes away, replace the original rear climate control panel.

DTC B2967 OR DTC INDICATOR A AND WINDSHIELD DEFROST: AN OPEN IN THE HUMIDITY SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

Is DTC B2967 or A and WINDSHIELD DEFROST indicated?

YES - Go to step 5.

NO - Intermittent failure, check for loose wires or poor connections on the humidity sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR TEST**).

   Is the humidity sensor OK?

   YES - Go to step 7.

   NO - Replace the humidity/in-car temperature sensor.

7. Disconnect the humidity/in-car temperature sensor 4P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the humidity/in-car temperature sensor 4P connector.

40P	4P
No. 6	No. 1
No. 8	No. 3
No. 27	No. 2

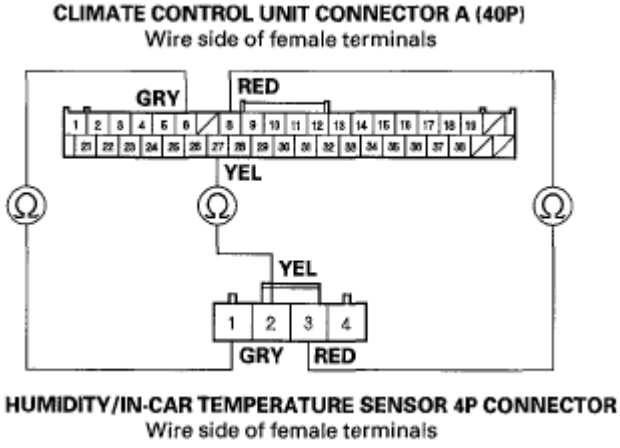


Fig. 110: Identifying Continuity Between Climate Control Unit A (40P) And Humidity/In-Car Temperature Sensor 4P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector A (40P) and at the humidity/in-car temperature sensor 4P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate

control unit.

NO - Repair open in the wire(s) between the climate control unit and the humidity sensor.

DTC B2968 OR DTC INDICATOR A AND WINDSHIELD DEFROST: A SHORT IN THE HUMIDITY SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B2968 or A and WINDSHIELD DEFROST indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Check for DTCs.

   Are these DTCs also present; B1234 or K and AUTO, and/or B1237 or N and AUTO, and/or B1245 or G, and/or B2980 or B and WINDSHIELD DEFROST?

   YES - Go to step 13.

   NO - Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**), and test it (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR TEST**).

   Is the humidity sensor OK?

   YES - Go to step 8.

   NO - Replace the humidity/in-car temperature sensor.

8. Disconnect the humidity/in-car temperature sensor 4P connector.
9. Disconnect climate control unit connector A (40P).
10. Check for continuity between body ground and climate control unit connector A (40P) No. 27 terminal.

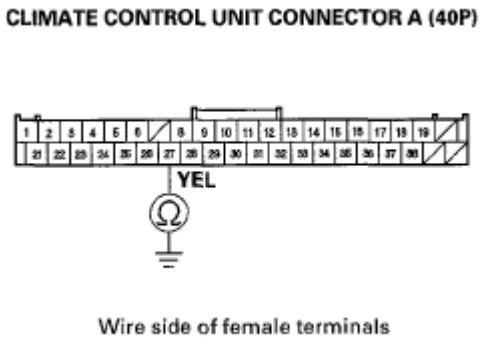


Fig. 111: Checking Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 27 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the humidity sensor.

NO - Go to step 11.

11. Check for continuity between climate control unit connector A (40P) No. 6 and No. 27 terminals.

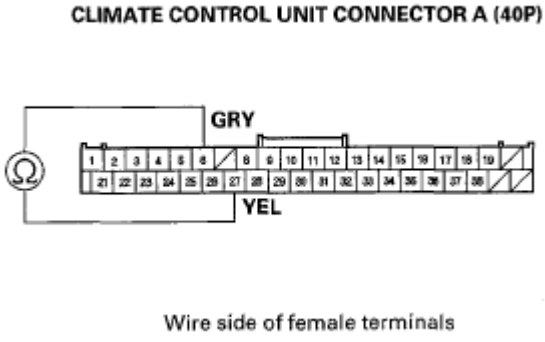


Fig. 112: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 And No. 27 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wires.

NO - Go to step 12.

12. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 27 terminal and body ground.

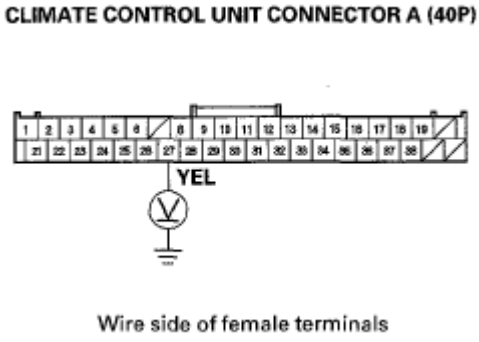


Fig. 113: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 27 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire between the climate control unit and the humidity sensor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

13. Turn the ignition switch to LOCK (0), and disconnect climate control unit connector A (40P).
14. Disconnect these items:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor
15. Check for continuity between climate control unit connector A (40P) No. 6 terminal and body ground.

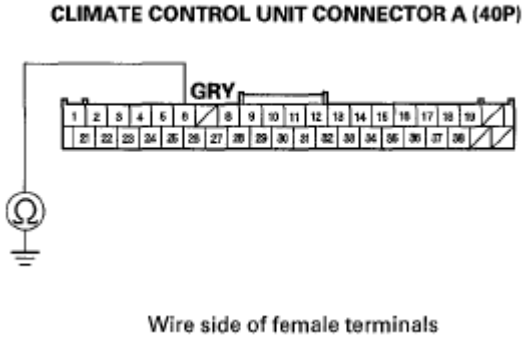


Fig. 114: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire.

NO - Go to step 16.

16. Turn the ignition switch to ON (II), and check the same terminal for voltage to body ground.

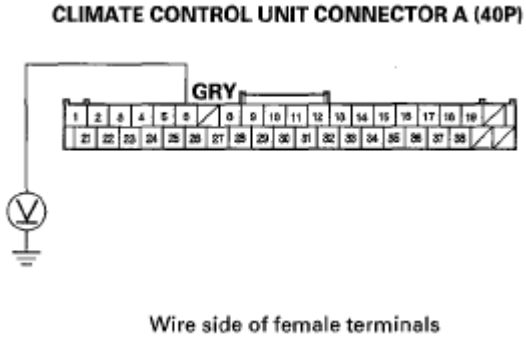


Fig. 115: Identifying Same Terminal For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire. This short may have also damaged the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 17.

17. Turn the ignition switch to LOCK (0).
18. Reconnect the climate control unit connector (40P).
19. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 6 terminal and body ground.

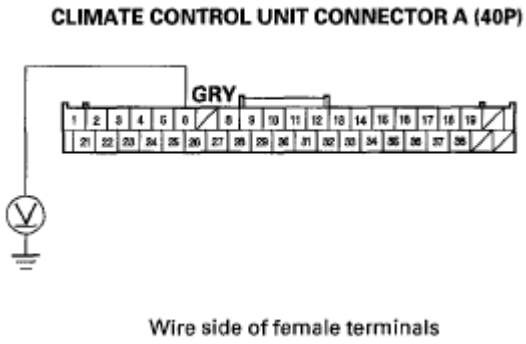


Fig. 116: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 20.

NO - Check for a loose wire or poor connection at climate control unit connector A (40P). If the connection is good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

20. While checking the same terminal for voltage to ground, reconnect these items individually and note the voltage reading each time:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor

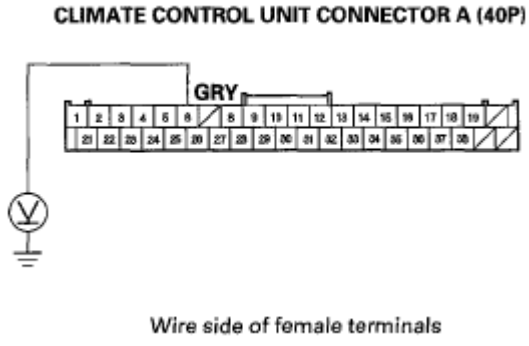


Fig. 117: Identifying Climate Control Unit Connector A (40P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage remain at about 5 V?

YES - Substitute a known-good climate control unit and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the component that caused the voltage drop.

DTC B2969: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH COMBINATION SWITCH CONTROL UNIT (WIPSW MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in the B-can system diagnosis test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).

3. Wait for 6 seconds or more.
4. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
5. Check the DTCs.

   Is DTC B2969 indicated?

   YES - Go to step 6.

   NO - Intermittent failure, check for loose wire or poor connection on the climate control unit connector A (40P).

6. Check for DTCs with the HDS.

   Are any of the following DTCs indicated; B1958, B1063, or B1156 indicated?

   YES - Do the wiper/washer switch (combination switch control unit) input test (see **WIPER/WASHER SWITCH (COMBINATION SWITCH CONTROL UNIT) INPUT TEST**).

   NO - Do the climate control unit troubleshooting (see **CLIMATE CONTROL UNIT TROUBLESHOOTING**).

DTC B2970: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH RELAY CONTROL MODULE (RM MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in the B-can system diagnosis test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Wait for 6 seconds or more.
4. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
5. Check the DTCs.

   Is DTC B2970 indicated?

   YES - Go to step 6.

   NO - Intermittent failure, check for loose wire or poor connection on the climate control unit connector A (40P).

6. Check for DTCs with the HDS.

Are any of the following DTCs indicated; B1005, B1959, B2162 or B1158 indicated?

YES - Do the relay control module input test (see **GAUGE CONTROL MODULE INPUT TEST**).

NO - Do the climate control unit troubleshooting (see **CLIMATE CONTROL UNIT TROUBLESHOOTING**).

DTC B2979 OR DTC INDICATOR B AND WINDSHIELD DEFROST: AN OPEN IN THE A/C PRESSURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B2979 or B and WINDSHIELD DEFROST indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the A/C pressure sensor circuit.

5. Turn the ignition switch to LOCK (0).
6. Disconnect the A/C pressure sensor 3P connector.
7. Disconnect climate control unit connector A (40P).
8. Check for continuity between the following terminals of climate control unit connector A (40P) and the A/C pressure sensor 3P connector.

40P	3P
No. 6	No. 1
No. 8	No. 3
No. 26	No. 2

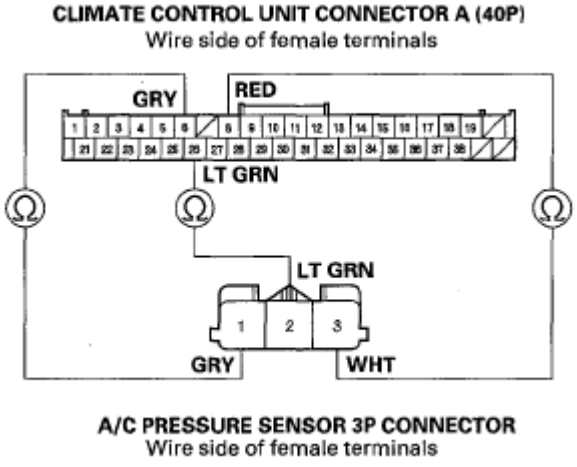


Fig. 118: Identifying Continuity Between Climate Control Unit A (40P) And A/C Pressure Sensor 3P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire(s) between the climate control unit and the A/C pressure sensor.

9. Reconnect climate control unit connector A (40P).
10. Turn the ignition switch to ON (II).
11. Measure the voltage between climate control unit connector A (40P) No. 6 and No. 8 terminals, and between climate control unit connector A (40P) No. 8 and No. 26 terminals.

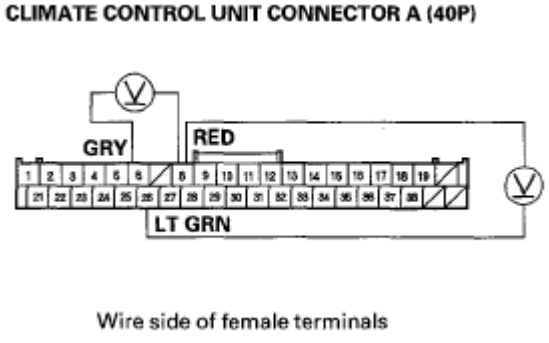


Fig. 119: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 And No. 8 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the A/C pressure sensor.

NO - Check for loose wires or poor connections at climate control unit connector A (40P) and at the A/C pressure sensor 3P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

DTC B2980 OR DTC INDICATOR B AND WINDSHIELD DEFROST: A SHORT IN THE A/C PRESSURE SENSOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check for DTCs.

   Is DTC B2980 or B and WINDSHIELD DEFROST indicated?

   YES - Go to step 5.

   NO - Intermittent failure.

5. Check for DTCs.

   Are these DTCs also present; B1234 or K and AUTO, and/or B1237 or N and AUTO, and/or B1245 or G, and/or B2968 or A and WINDSHIELD DEFROST?

   YES - Go to step 16.

   NO - Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Disconnect the A/C pressure sensor 3P connector.
8. Disconnect climate control unit connector A (40P).
9. Check for continuity between body ground and climate control unit connector A (40P) No. 26 terminal.

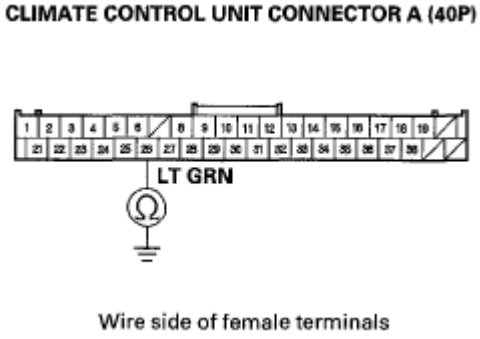


Fig. 120: Identifying Continuity Between Body Ground And Climate Control Unit Connector A

(40P) No. 26 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the A/C pressure sensor.

NO - Go to step 10.

10. Check for continuity between climate control unit connector A (40P) No. 6 and No. 26 terminals.

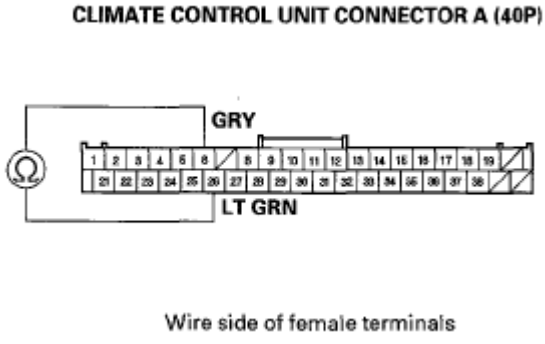


Fig. 121: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 And No. 26 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair the short in the wires.

NO - Go to step 11.

11. Turn the ignition switch to ON (II), and measure the voltage between body ground and climate control unit connector A (40P) No. 26 terminal.

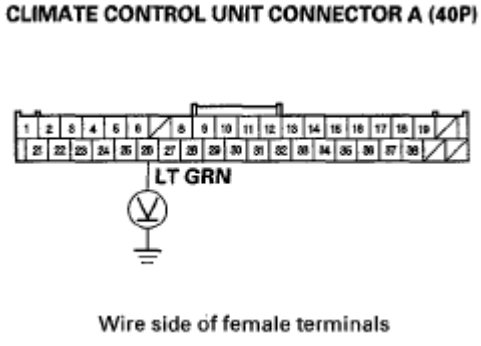


Fig. 122: Measuring Voltage Between Body Ground And Climate Control Unit Connector A (40P)

No. 26 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire between the climate control unit and the A/C pressure sensor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 12.

12. Turn the ignition switch to LOCK (0).
13. Reconnect climate control unit connector A (40P).
14. Turn the ignition switch to ON (II).
15. Measure the voltage between climate control unit connector A (40P) No. 6 and No. 8 terminals, and between climate control unit connector A (40P) No. 8 and No. 26 terminals.

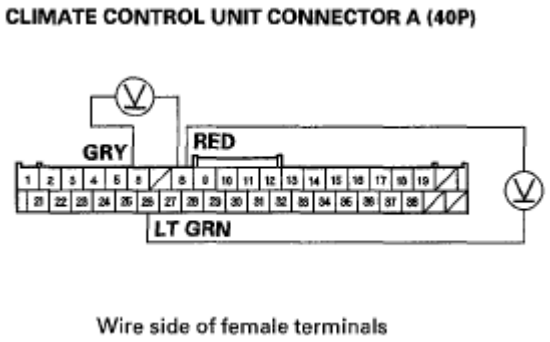


Fig. 123: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 And No. 8 And No. 26 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Replace the A/C pressure sensor.

NO - Check for loose wires or poor connections at climate control unit connector A (40P) and at the A/C pressure sensor 3P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

16. Turn the ignition switch to LOCK (0), and disconnect climate control unit connector A (40P).
17. Disconnect these items:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor

- A/C pressure sensor

18. Check for continuity between climate control unit connector A (40P) No. 6 terminal and body ground.

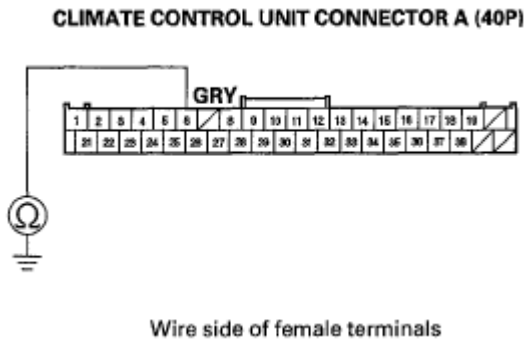


Fig. 124: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire.

NO - Go to step 19.

19. Turn the ignition switch to ON (II), and check the same terminal for voltage to body ground.

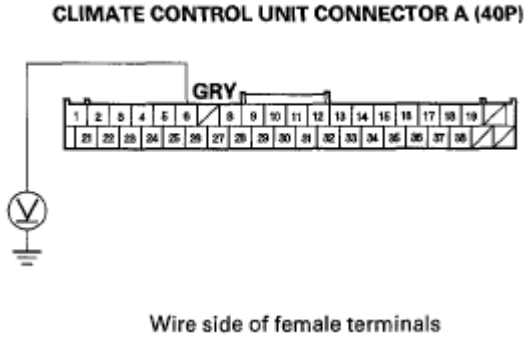


Fig. 125: Identifying Same Terminal For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire. This short may have also damaged the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 20.

20. Turn the ignition switch to LOCK (0).

21. Reconnect climate control unit connector (40P).
22. Turn the ignition switch to ON (II), and measure the voltage between climate control unit connector A (40P) No. 6 terminal and body ground.

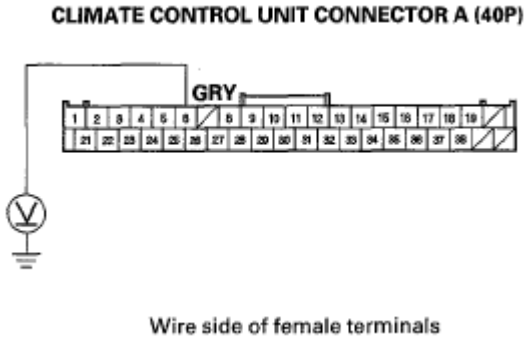


Fig. 126: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 6 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 5 V?

YES - Go to step 23.

NO - Check for a loose wire or poor connection at climate control unit connector A (40P). If the connection is good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

23. While checking the same terminal for voltage to ground, reconnect these items individually and note the voltage reading each time:
    - Driver's air mix control motor
    - Passenger's air mix control motor
    - Rear air mix control motor
    - Humidity/in-car temperature sensor
    - A/C pressure sensor

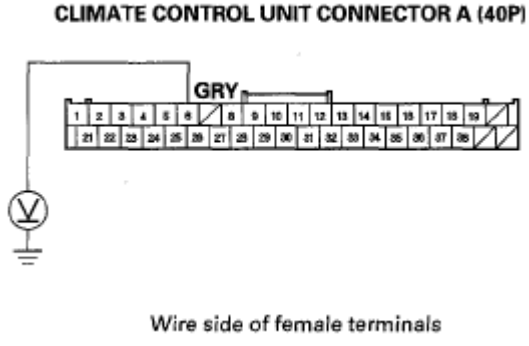


Fig. 127: Identifying Same Terminal For Voltage To Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the voltage remain at about 5 V?

YES - Substitute a known-good climate control unit and recheck. If the symptom/indication goes away, replace the original climate control unit.

NO - Replace the component that caused the voltage drop.

DTC B2981: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH NAVIGATION UNIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
4. Check the DTCs.

   Is DTC B2981 indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the navigation unit and climate control unit circuit.

5. Turn the ignition switch to LOCK (0).
6. Disconnect navigation unit connector A (20P).
7. Disconnect climate control unit connector A (40P).
8. Check for continuity between the following terminals of climate control unit connector A (40P) and navigation unit connector A (20P).

40P	20P
No. 2	No. 4
No. 21	No. 15
No. 22	No. 14

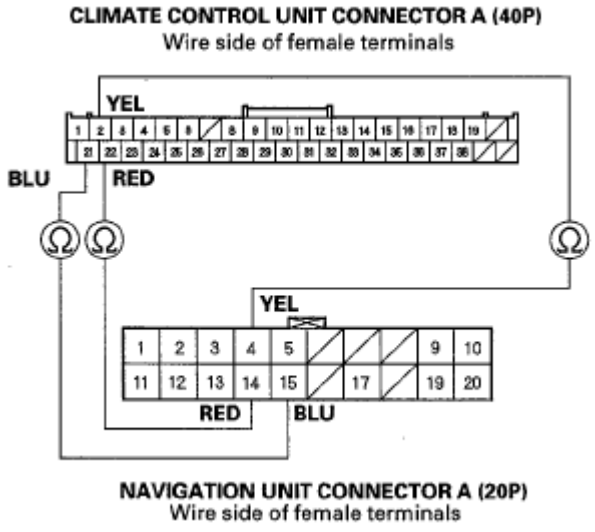


Fig. 128: Identifying Continuity Between Climate Control Unit A (40P) And Navigation Unit Connector A (20P) Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire(s) between the climate control unit and the navigation unit.

9. Check for continuity between body ground and navigation unit connector A (20P) No. 4,14, and 15 terminals individually.

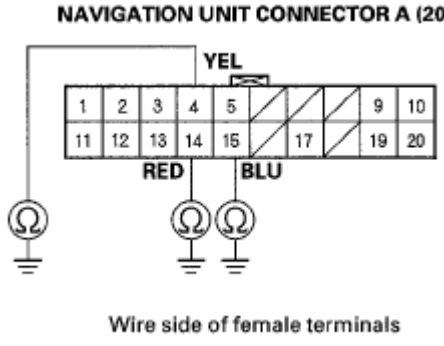


Fig. 129: Identifying Continuity Between Body Ground And Navigation Unit Connector A (20P) No. 4,14, And 15 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the navigation unit.

NO - Go to step 10.

10. Check for continuity between navigation unit connector A (20P) terminals as follows.

TERMINALS REFERENCE CHART

From terminal	To terminals
4	14, 15
14	15

Is there continuity between any of the terminals?

YES - Repair the short in the wires.

NO - Substitute a known-good navigation unit, and recheck. If the symptom goes away, replace the original navigation unit. If the symptom remains, substitute a known-good climate control unit and recheck. If the symptom goes away, replace the original climate control unit.

DTC B2983 OR DTC INDICATOR K: A PROBLEM IN THE RECIRCULATION CONTROL LINKAGE, DOOR, OR MOTOR CIRCUIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**) or climate control unit (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).
4. Check the DTCs.

   Is DTC B2983 or K indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the recirculation control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**).

   Is the recirculation control motor OK?

   YES - Go to step 7.

   NO - Replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**), or repair the recirculation control linkage or door.

7. Disconnect the recirculation control motor 7P connector.

8. Disconnect climate control unit connector A (40P).
9. Check for continuity between the following terminals of climate control unit connector A (40P) and the recirculation control motor 7P connector.

40P	7P
No. 18	No. 1
No. 19	No. 2

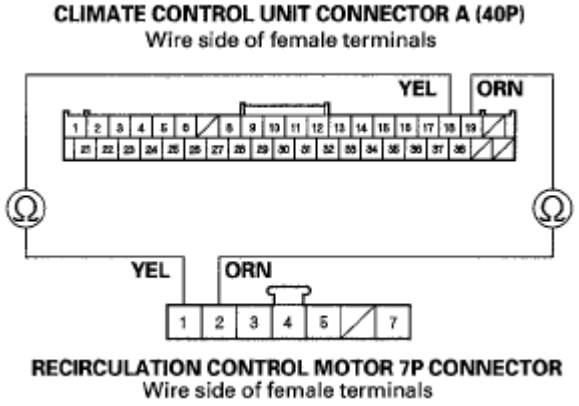


Fig. 130: Identifying Continuity Between Climate Control Unit A (40P) And Recirculation Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 10.

NO - Repair open in the wire(s) between the climate control unit and the recirculation control motor.

10. Check for continuity between body ground and climate control unit connector A (40P) No. 18 and No. 19 terminals individually.

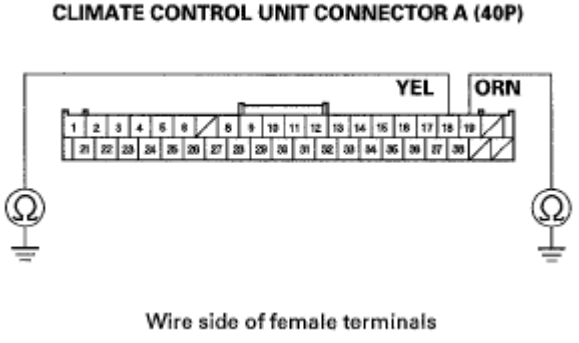


Fig. 131: Identifying Continuity Between Body Ground And Climate Control Unit Connector A (40P) No. 18 And No. 19 Terminals

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the recirculation control motor.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

DTC B2991: CLIMATE CONTROL UNIT LOST COMMUNICATION WITH AUDIO UNIT

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the HDS (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITH THE HDS**).
4. Check for DTCs.

   Is DTC B2991 indicated?

   YES - Go to step 5.

   NO - Intermittent failure, check for loose wires or poor connections on the rear climate control panel and climate control unit circuit.

5. Turn the ignition switch to LOCK (0).
6. Disconnect climate control unit connector B (14P).
7. Disconnect audio unit connector C (24P).
8. Check for continuity between climate control unit connector B (14P) No. 8 terminal and audio unit connector C (24P) No. 24 terminal.

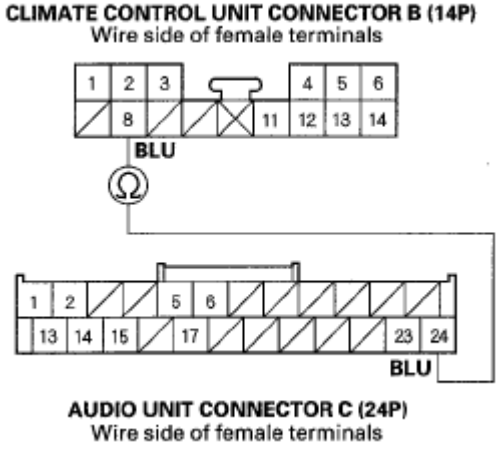

CLIMATE CONTROL UNIT CONNECTOR B (14P)
Wire side of female terminals
1 2 3 4 5 6
8 11 12 13 14
BLU
Ω
1 2 5 6
13 14 15 17 23 24
BLU
AUDIO UNIT CONNECTOR C (24P)
Wire side of female terminals

Fig. 132: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 8 And No. 24

Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 9.

NO - Repair open in the wire between the climate control unit and the audio unit.

9. Check for continuity between climate control unit connector B (14P) No. 8 terminal and body ground.

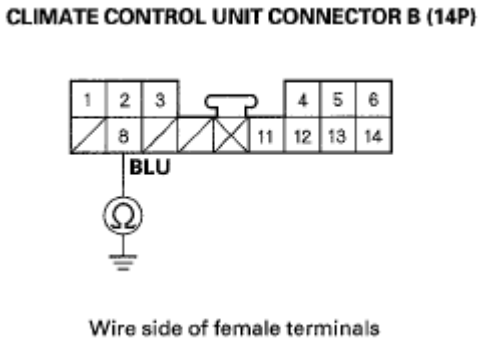


Fig. 133: Identifying Continuity Between Climate Control Unit Connector B (14P) No. 8 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the climate control unit and the audio unit.

NO - Substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit. If the symptom/indication remains, substitute a known-good audio unit. If the symptom/indication goes away, replace the original audio unit.

REAR MODE CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 30(10 A) fuse in the under-dash fuse/ relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck. If the fuse blows again, check for a short in the No. 30 (10 A) fuse circuit.

2. Disconnect the rear mode control motor 7P connector.
3. Turn the ignition switch to ON (II).

4. Measure the voltage between the rear mode control motor 7P connector No. 1 terminal and body ground.

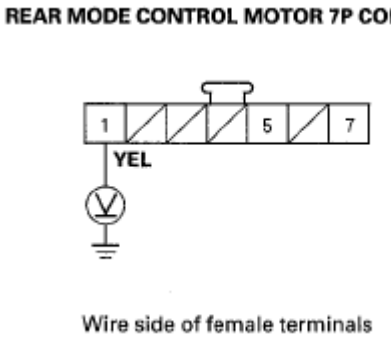


Fig. 134: Measuring Voltage Between Rear Mode Control Motor 7P Connector No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the rear mode control motor.

5. Turn the ignition switch to LOCK (0).
6. Test the rear mode control motor (see **REAR MODE CONTROL MOTOR TEST**).

Is the rear mode control motor OK?

YES - Go to step 7.

NO - Replace the rear mode control motor (see **REAR MODE CONTROL MOTOR TEST**), or repair the rear mode control linkage or door.

7. Disconnect climate control unit connector B (14P).
8. Check for continuity between body ground and climate control unit connector B (14P) No. 3 and No. 4 terminals individually.

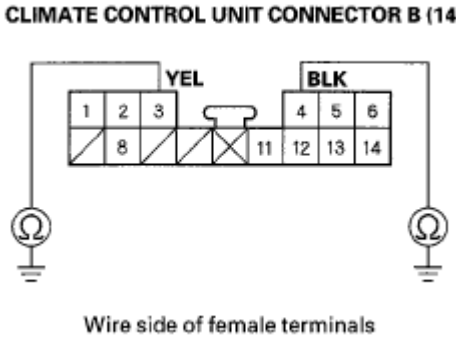


Fig. 135: Identifying Continuity Between Body Ground And Climate Control Unit Connector B (14P) No. 3 And No. 4 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire(s) between the climate control unit and the rear mode control motor.

NO - Go to step 9.

9. Turn the ignition switch to ON (II), and check the same terminals for voltage to body ground.

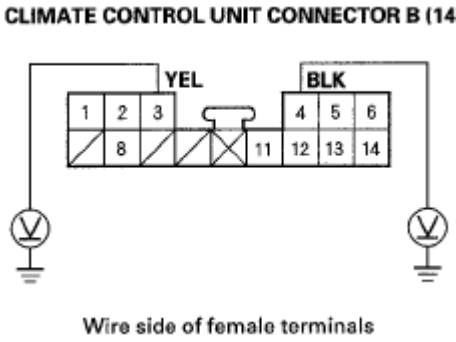


Fig. 136: Identifying Same Terminals For Voltage To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair short to power in the wire(s) between the climate control unit and the rear mode control motor. This short may also damage the climate control unit. Repair the short to power before replacing the climate control unit.

NO - Go to step 10.

10. Turn the ignition switch to LOCK (0).
11. Check for continuity between the following terminals of climate control unit connector B (14P) and the

rear mode control motor 7P connector.

14P	7P
No. 3	No. 5
No. 4	No. 7

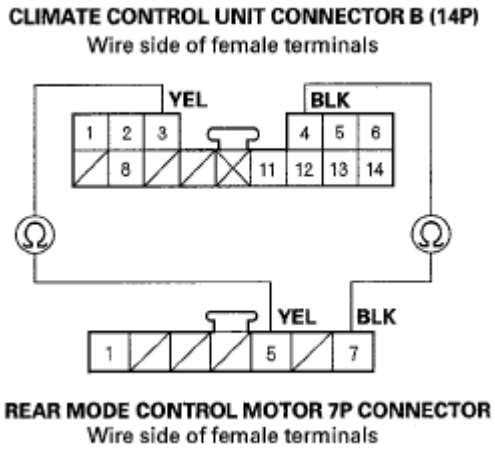


Fig. 137: Identifying Continuity Between Climate Control Unit B (14P) And Rear Mode Control Motor 7P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at climate control unit connector B (14P) and at the rear mode control motor 7P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire(s) between the climate control unit and the rear mode control motor.

CLIMATE CONTROL UNIT TROUBLESHOOTING

1. Check the No. 30 (10 A) fuse in the under-dash fuse/ relay box.

   Is the fuse OK?

   YES - Go to step 2.

   NO - Replace the fuse, and recheck. If the fuse blows again, check for a short in the No. 30 (10 A) fuse circuit.

2. Turn the ignition switch to ON (II).
3. Measure the voltage between climate control unit connector A (40P) No. 3 terminal and body ground.

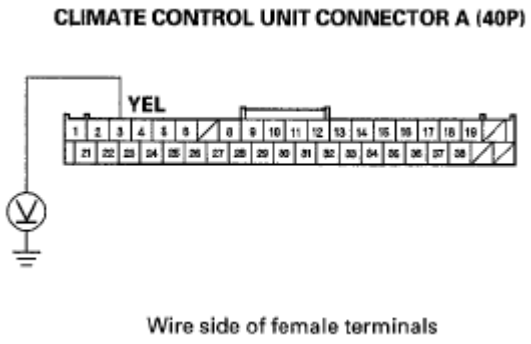


Fig. 138: Measuring Voltage Between Climate Control Unit Connector A (40P) No. 3 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the climate control unit.

4. Turn the ignition switch to LOCK (0).
5. Check for continuity between climate control unit connector A (40P) No. 37 terminal and body ground.

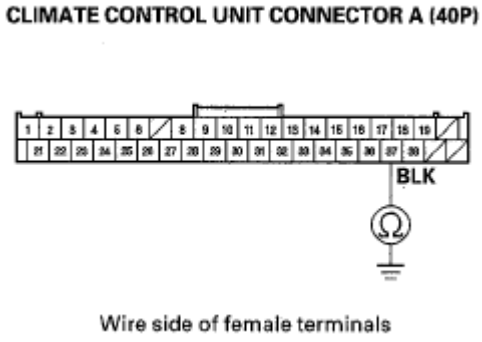


Fig. 139: Identifying Continuity Between Climate Control Unit Connector A (40P) No. 37 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.

NO - Check for an open in the wire between the climate control unit and body ground. If the wire is OK, check for poor ground at G506 (see **GROUND TO COMPONENTS INDEX**).

6. Disconnect climate control unit connector A (40P).

7. Disconnect under-dash fuse/relay box connector X (39P).
8. Check for continuity between under-dash fuse/relay box connector X (39P) No. 27 terminal and climate control unit connector A (40P) No. 4 terminal.

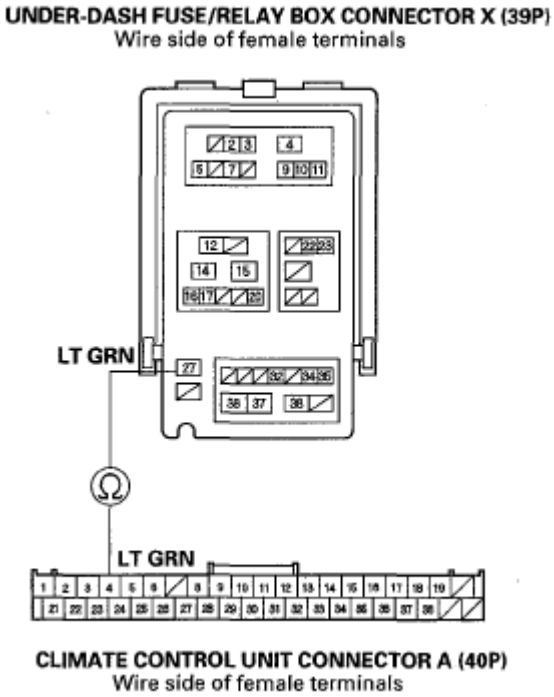

UNDER-DASH FUSE/RELAY BOX CONNECTOR X (39P)
Wire side of female terminals
LT GRN
LT GRN
CLIMATE CONTROL UNIT CONNECTOR A (40P)
Wire side of female terminals

Fig. 140: Identifying Continuity Between Under-Dash Fuse/Relay Box Connector X (39P) No. 27 And No. 4 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires and poor connections at climate control unit connector A (40P). If the connections are good, substitute a known-good climate control unit and recheck. If the symptom/ indication goes away, replace the original climate control unit.

NO - Repair open in the wire between the MICU and the climate control unit.

RADIATOR AND A/C CONDENSER FAN LOW SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the A/C compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before performing symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 15 (30 A) fuse in the relay block, and the No. 30 (10 A) fuse in the under-dash fuse/relay

box.

Are the fuses OK?

YES - Go to step 2.

NO - Replace the fuse(s), and recheck. If the fuse(s) blow again, check for a short in the No. 15 (30 A) and No. 30 (10 A) fuse(s) circuit.

2. Remove the A/C condenser fan relay from the relay block, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 3.

   NO - Replace the A/C condenser fan relay.

3. Connect the HDS to the DLC.
4. Turn the ignition switch to ON (II).
5. Turn on the A/C.
6. Check the FAN LOW CTRL in the PGM-FI Data List with the HDS.

   Is the FAN LOW CTRL on?

   YES - Go to step 7.

   NO - Substitute a known-good PCM (see **SUBSTITUTING THE PCM**), and retest. If the symptom/indication goes away with a known-good PCM, replace the original PCM (see **PCM REPLACEMENT**).

7. Measure the voltage between the A/C condenser fan relay 4P socket No. 1 terminal and body ground.

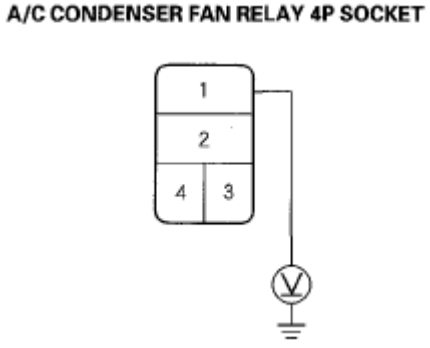


Fig. 141: Measuring Voltage Between A/C Condenser Fan Relay 4P Socket No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 8.

NO - Replace the under-hood fuse/relay box (see **REMOVAL AND INSTALLATION**).

8. Connect the A/C condenser fan relay 4P socket No. 1 and No. 2 terminals with a jumper wire.

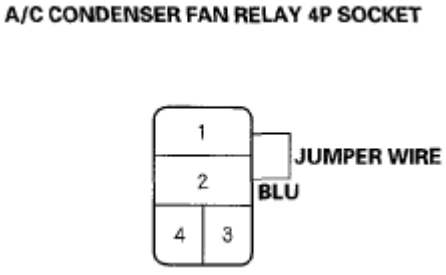


Fig. 142: Identifying A/C Condenser Fan Relay 4P Socket No. 1 And No. 2 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Do the A/C condenser and radiator fans run on low?

YES - Go to step 9.

NO - Go to step 18.

9. Disconnect the jumper wire.
10. Turn the ignition switch to ON (II).
11. Measure the voltage between the A/C condenser fan relay 4P socket No. 4 terminal and body ground.

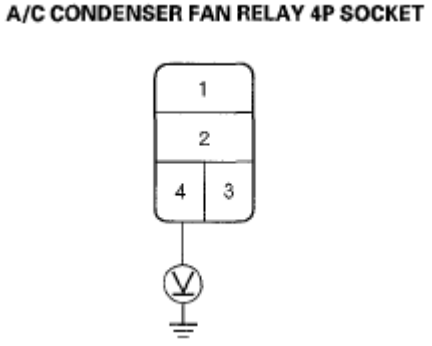


Fig. 143: Measuring Voltage Between A/C Condenser Fan Relay 4P Socket No. 4 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 12.

NO - Go to step 36.

12. Turn the ignition switch to LOCK (0).
13. Reinstall the A/C condenser fan relay.
14. Jump the SCS line with the HDS.

NOTE: This step must be done to protect the powertrain control module (PCM) from damage.

15. Disconnect PCM connector A (49P).
16. Connect PCM connector A (49P) No. 4 terminal to body ground with a jumper wire.

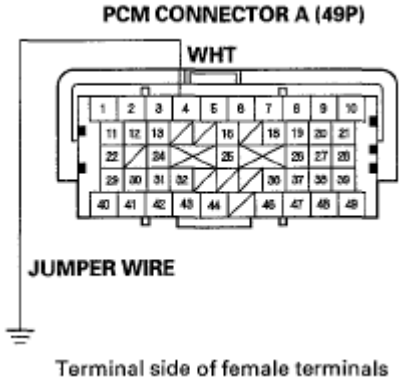


Fig. 144: Identifying PCM Connector A (49P) No. 4 Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

17. Turn the ignition switch to ON (II).

Do the A/C condenser and radiator fans run on low?

YES - Check for loose wires or poor connections at PCM connector A (49P) terminal No. 4. If the connections are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM (see **PCM REPLACEMENT**).

NO - Repair open in the wire between the A/C condenser fan relay and the PCM.

18. Disconnect the jumper wire.
19. Reinstall the A/C condenser fan relay.
20. Disconnect the A/C condenser fan 2P connector.
21. Turn the ignition switch to ON (II), then set the A/C button and fan control button ON.
22. Measure the voltage between the A/C condenser fan 2P connector No. 2 terminal and body ground.

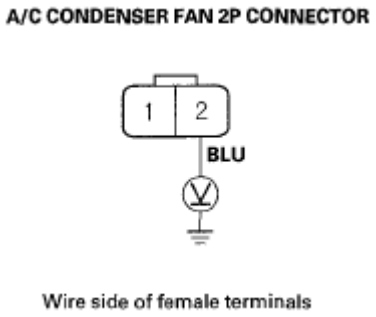


Fig. 145: Measuring Voltage Between A/C Condenser Fan 2P Connector No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 23.

NO - Repair open in the wire between the A/C condenser fan relay and the A/C condenser fan.

23. Set the A/C button and fan control button OFF, then turn the ignition switch to LOCK (0).
24. Reconnect the A/C condenser fan 2P connector.
25. Connect the A/C condenser fan 2P connector No. 1 terminal to body ground with a jumper wire.

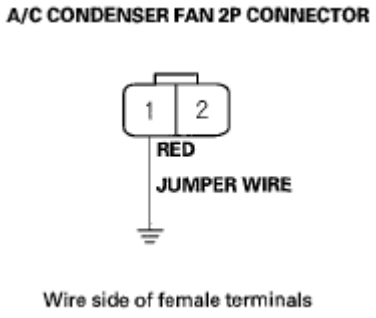


Fig. 146: Identifying A/C Condenser Fan 2P Connector No. 1 Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

26. Turn the ignition switch to ON (II), then set the A/C button and fan control button ON.

Does the A/C condenser fan run at high speed?

YES - Go to step 27.

NO - Replace the A/C condenser fan motor (see **RADIATOR AND FAN REPLACEMENT**).

27. Set the A/C button and fan control button OFF, then turn the ignition switch to LOCK (0).
28. Disconnect the jumper wire.

29. Remove the fan control relay from the relay block, and test it (see **RELAY CONTROL MODULE TEST**).

    Is the relay OK?

    YES - Go to step 30.

    NO - Replace the fan control relay.

30. Turn the ignition switch to ON (II), then set the A/C button and fan control button ON.
31. Measure the voltage between the fan control relay 5P socket No. 1 terminal and body ground.

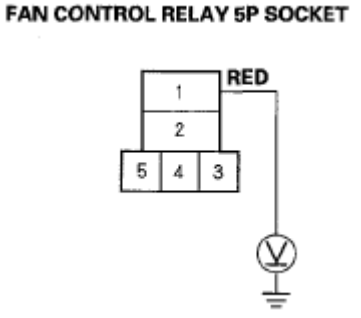


Fig. 147: Measuring Voltage Between Fan Control Relay 5P Socket No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 32.

NO - Repair open in the wire between the A/C condenser fan and the fan control relay.

32. Set the A/C button and fan control button OFF, then turn the ignition switch to LOCK (0).
33. Disconnect the radiator fan 2P connector.
34. Check for continuity between the fan control relay 5P socket No. 4 terminal and the radiator fan 2P connector No. 2 terminal.

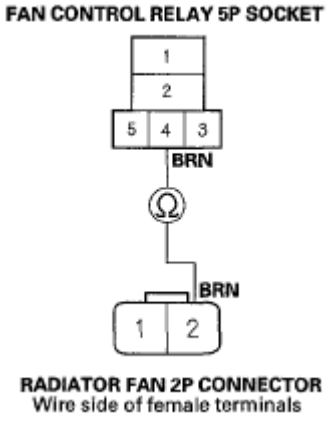


Fig. 148: Identifying Continuity Between Fan Control Relay 5P Socket No. 4 And No. 2 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 35.

NO - Repair open in the wire between the fan control relay and the radiator fan.

35. Check for continuity between the radiator fan 2P connector No. 1 terminal and body ground.

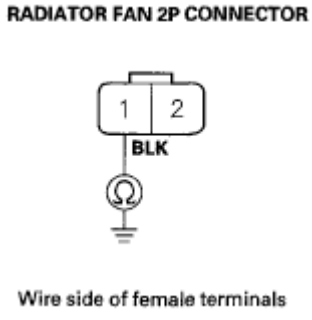


Fig. 149: Identifying Continuity Between Radiator Fan 2P Connector No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Replace the radiator fan motor (see **RADIATOR AND FAN REPLACEMENT**).

NO - Check for an open in the wire between the radiator fan and body ground. If the wire is OK, check for poor ground at G301 (see **GROUND TO COMPONENTS INDEX**).

36. Turn the ignition switch to LOCK (0).
37. Remove A/C diode A from the relay block.

38. Using the diode setting on a DVOM, check for current flow in both directions between the A/C diode A No. 1 and No. 2 terminals.

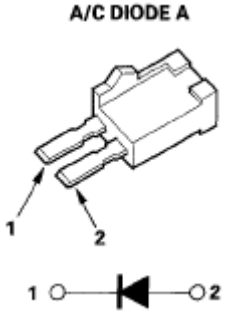


Fig. 150: Identifying Current Flow In Both Directions Between A/C Diode No. 1 And No. 2 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there current flow in only one direction?

YES - Go to step 39.

NO - Replace A/C diode A.

39. Turn the ignition switch to ON (II).
40. Measure the voltage between A/C diode A 2P socket No. 2 terminal and body ground.

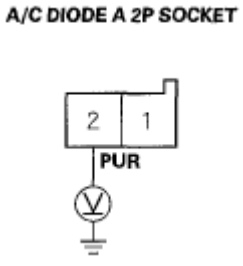


Fig. 151: Measuring Voltage Between A/C Diode 2P Socket No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the under-hood fuse/relay box (see **REMOVAL AND INSTALLATION**).

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and A/C diode A.

A/C CONDENSER FAN HIGH SPEED CIRCUIT TROUBLESHOOTING

NOTE:

- **Do not use this troubleshooting procedure if the radiator fan and/or the A/C compressor is inoperative. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before doing any symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Remove the fan control relay from the relay block, and test it (see **RELAY CONTROL MODULE TEST**).

   Is the relay OK?

   YES - Go to step 2.

   NO - Replace the fan control relay.

2. Turn the ignition switch to ON (II).
3. Measure the voltage between the fan control relay 5P socket No. 5 terminal and body ground.

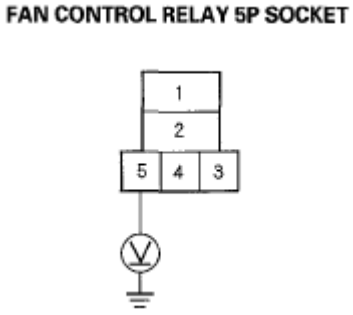


Fig. 152: Measuring Voltage Between Fan Control Relay 5P Socket No. 5 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 4.

NO - Replace the under-hood fuse/relay box (see **REMOVAL AND INSTALLATION**).

4. Turn the ignition switch to LOCK (0).
5. Check for continuity between the fan control relay 5P socket No. 2 terminal and body ground.

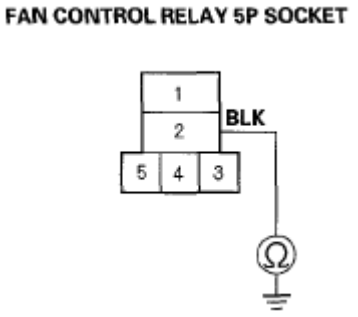


Fig. 153: Identifying Continuity Between Fan Control Relay 5P Socket No. 2 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.

NO - Check for an open in the wire between the fan control relay and body ground. If the wire is OK, check for poor ground at G202 (see **GROUND TO COMPONENTS INDEX**).

6. Jump the SCS line with the HDS.

NOTE: This step must be done to protect the powertrain control module (PCM) from damage.

7. Disconnect PCM connector A (49P).
8. Check for continuity between the fan control relay 5P socket No. 3 terminal and PCM connector A (49P) No. 5 terminal.

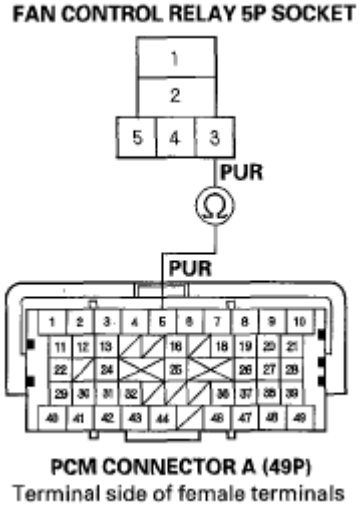


Fig. 154: Identifying Continuity Between Fan Control Relay 5P Socket No. 3 And No. 5 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at PCM connector A (49P) No. 5 terminal. If the connections are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM (see **PCM REPLACEMENT**).

NO - Repair open in the wire between the fan control relay and the PCM.

A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING

NOTE:

- **It is normal for the A/C compressor to turn off under certain conditions, such as low idle, high engine coolant temperature, hard acceleration, or high/low pressure.**
- **Do not use this troubleshooting procedure if the fans are also inoperative with the A/C on. Refer to the SYMPTOM TROUBLESHOOTING INDEX.**
- **Before doing any symptom troubleshooting, check for powertrain DTCs (see GENERAL TROUBLESHOOTING INFORMATION).**

1. Check the No. 17 (7.5 A) fuse in the relay block, and the No. 30 (10 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES - Go to step 2.

   NO - Replace the fuse(s) and recheck. If the fuse(s) blow again, check for a short in the No. 17 (7.5 A) and No. 30 (10 A)fuse(s) circuit.

2. Connect the HDS to the DLC.
3. Start the engine.
4. Turn on the A/C.
5. Check the A/C CLUTCH in the PGM-FI Data List with the HDS.

   Is the A/C CLUTCH on?

   YES - Go to step 7.

   NO - Go to step 6.

6. Using the HDS, confirm the following values in the PGM-FI Data List at idle.

A/C SWITCH REFERENCE CHART

A/C SWITCH	ON
A/C PRESSURE SENSOR	196-3, 138 kPa (2-32 kgf/cm^2) [28-455 psi]

Are all the values within specifications?

YES - Go to step 7.

NO - Troubleshoot the value that is not within the specifications.

7. Remove the A/C compressor clutch relay from the relay block, and test it (see **POWER RELAY TEST**).

   Is the relay OK?

   YES - Go to step 8.

   NO - Replace the A/C compressor clutch relay.

8. Measure the voltage between the A/C compressor clutch relay 4P socket No. 1 terminal and body ground.

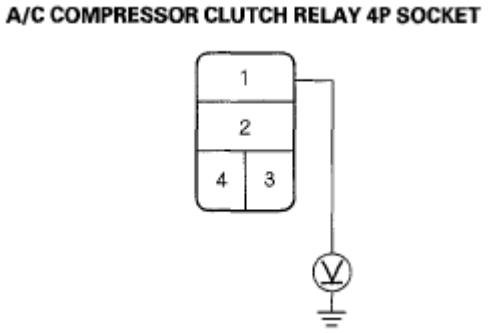


Fig. 155: Measuring Voltage Between A/C Compressor Clutch Relay 4P Socket No. 1 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 9.

NO - Replace the relay block (see **REMOVAL AND INSTALLATION**).

9. Connect the A/C compressor clutch relay 4P socket No. 1 and No. 2 terminals with a jumper wire.

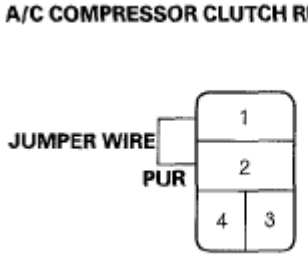


Fig. 156: Identifying A/C Compressor Clutch Relay 4P Socket No. 1 And No. 2 Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Does the A/C compressor clutch click?

YES - Go to step 10.

NO - Go to step 19.

10. Disconnect the jumper wire.
11. Turn the ignition switch to ON (II).
12. Measure the voltage between the A/C compressor clutch relay 4P socket No. 4 terminal and body ground.

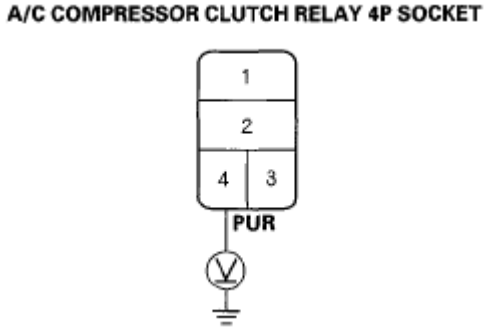


Fig. 157: Measuring Voltage Between A/C Compressor Clutch Relay 4P Socket No. 4 Terminal And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 13.

NO - Repair open in the wire between the No. 30 (10 A) fuse in the under-dash fuse/relay box and the A/C compressor clutch relay.

13. Turn the ignition switch to LOCK (0).
14. Reinstall the A/C compressor clutch relay.
15. Jump the SCS line with the HDS.

NOTE: This step must be done to protect the powertrain control module (PCM) from damage.

16. Disconnect PCM connector A (49P).
17. Connect PCM connector A (49P) No. 13 terminal to body ground with a jumper wire.

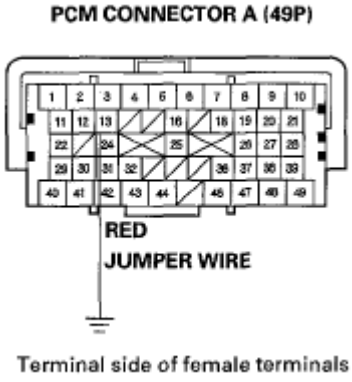


Fig. 158: Identifying PCM Connector A (49P) No. 13 Terminal To Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

18. Turn the ignition switch to ON (II).

    Does the A/C compressor click?

    YES - Check for loose wires or poor connections at PCM connector A (49P). If the connections are good, check the PCM grounds. If the grounds are good, substitute a known-good PCM, and recheck. If the symptom/indication goes away, replace the original PCM (see **PCM REPLACEMENT**).

    NO - Repair open in the wire between the A/C compressor clutch relay and the PCM.

19. Disconnect the jumper wire.
20. Disconnect the A/C compressor clutch 1P connector.
21. Check for continuity between the A/C compressor clutch relay 4P socket No. 2 terminal and the A/C compressor clutch 1P connector No. 1 terminal.

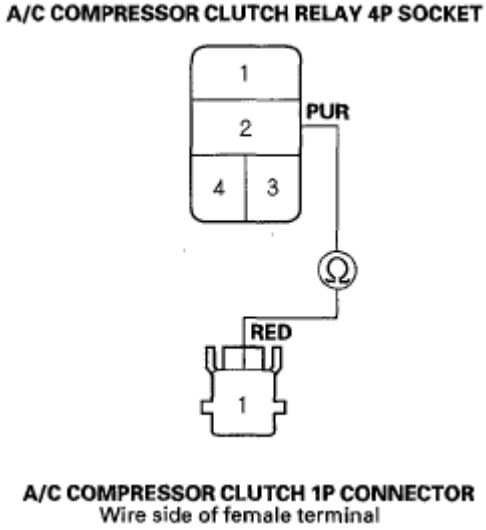


Fig. 159: Identifying Continuity Between A/C Compressor Clutch Relay 4P Socket No. 2 And No. 1

Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check the A/C compressor clutch clearance, and the compressor clutch field coil (see **A/C COMPRESSOR CLUTCH CHECK**). Repair as needed.

NO - Repair open in the wire between the A/C compressor clutch relay and the A/C compressor clutch.

HUMIDITY/IN-CAR TEMPERATURE SENSOR TEST

HUMIDITY SENSOR TEST

1. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**).
2. Connect the humidity/in-car temperature sensor 4P connector.
3. Turn the ignition switch to ON (II). Measure the voltage between the terminals with the (+) probe on the No. 2 terminal and the (-) probe on the No. 3 terminal with the connector connected.

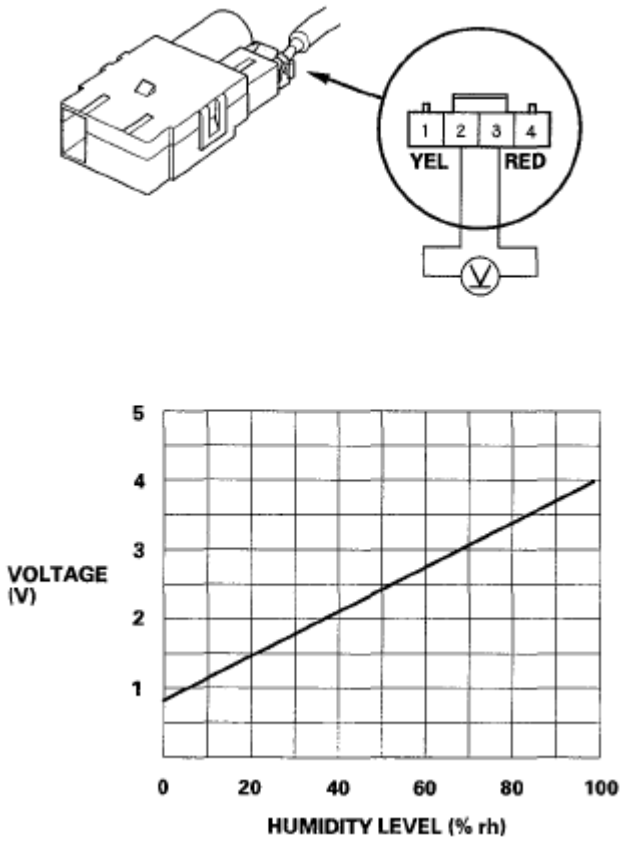


Fig. 160: Measuring Voltage Between Terminals With (+) Probe On No. 2 And (-) Probe On No. 3 Terminal

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the voltage is not as specified, replace the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**).

IN-CAR TEMPERATURE SENSOR TEST

1. Remove the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**).
2. Connect the humidity/in-car temperature sensor 4P connector.
3. Test the humidity/in-car temperature sensor while holding it in front of the dashboard center vent.
   - Measure the resistance with the system set to Max Cool.
   - Measure the resistance with the system set to Max Hot.
4. Compare the resistance reading between the No. 4 and No. 3 terminals of the humidity/in-car temperature sensor with the specifications shown in the graph; the resistance should be within the specifications.

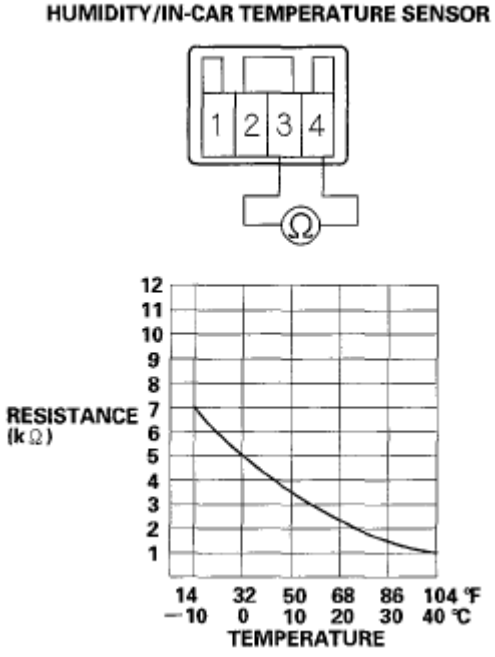


Fig. 161: Resistance To Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the resistance is not as specified, replace the humidity/in-car temperature sensor (see **HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT**).

HUMIDITY/IN-CAR TEMPERATURE SENSOR REPLACEMENT

1. Remove the driver's dashboard lower cover (see **DRIVER'S DASHBOARD LOWER COVER REMOVAL/INSTALLATION**).

2. Remove the humidity/in-car temperature sensor (A) from the driver's dashboard lower cover (B).

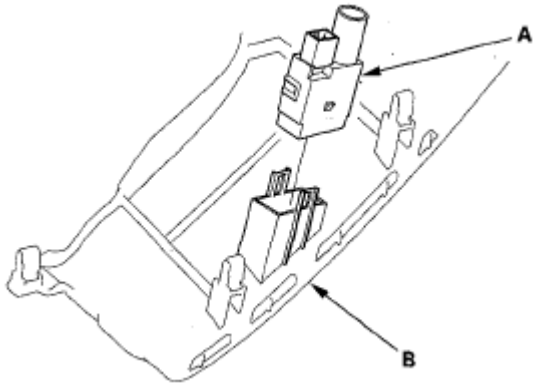


Fig. 162: Identifying Humidity/In-Car Temperature Sensor And Driver's Dashboard Lower Cover
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal. Be sure to connect the air hose securely.

OUTSIDE AIR TEMPERATURE SENSOR TEST

1. Remove the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**).
2. Dip the sensor in ice water, and measure the resistance. Then pour warm water on the sensor, and check for a change in resistance.
3. Compare the resistance reading between the No. 1 and No. 2 terminals of the outside air temperature sensor with the specifications shown in the graph; the resistance should be within the specifications.

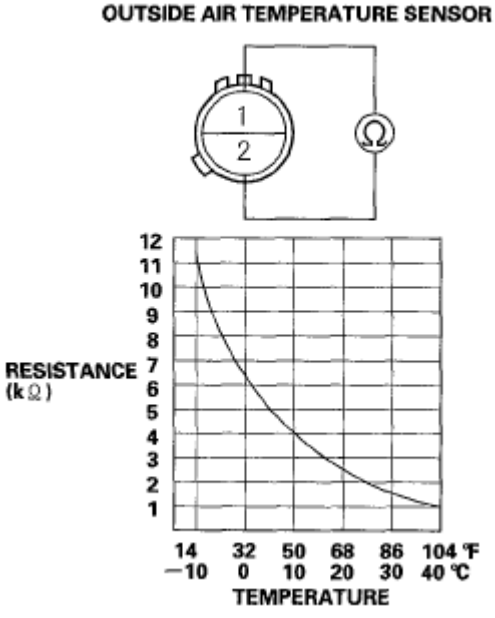


Fig. 163: Resistance To Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the resistance is not as specified, replace the outside air temperature sensor (see **OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT**).

OUTSIDE AIR TEMPERATURE SENSOR REPLACEMENT

1. Remove the bulkhead cover (see **FRONT BULKHEAD COVER REPLACEMENT**).
2. Lift the tab (A) to release the lock, then remove the outside air temperature sensor (B) from the back of the front bumper. Disconnect the 2P connector (C) from the outside air temperature sensor.

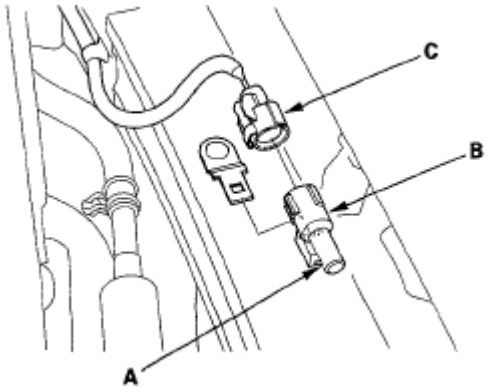


Fig. 164: Identifying Tab,Air Temperature Sensor And 2P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the sensor in the reverse order of removal.

SUNLIGHT SENSOR TEST

1. Remove the sunlight sensor from the dashboard (see **SUNLIGHT SENSOR REPLACEMENT**).
2. Connect the sunlight sensor 5P connector.
3. Turn the ignition switch to ON (II). Measure the voltage between the terminals with the (+) probe on the No. 4 terminal and the (-) probe on the No. 2 terminal with the connector connected.

NOTE: The voltage readings will not change under the light of a flashlight or a fluorescent lamp.

Voltage should be:

- 3.6-3.7 V or more with the sensor out of direct sunlight.
- 3.3-3.5 V or less with the sensor in direct sunlight.

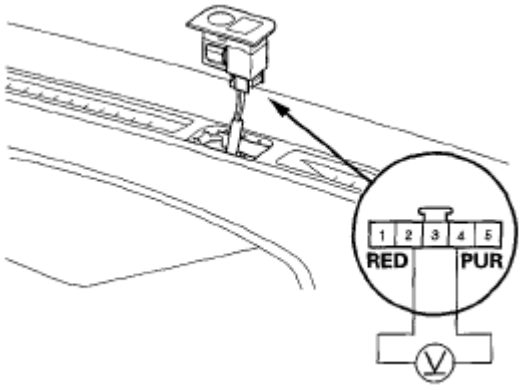


Fig. 165: Measuring Voltage Between Terminals With (+) Probe On No. 4 And (-) Probe On No. 2 Terminal With Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. If the voltage is not as specified, replace the sunlight sensor (see **SUNLIGHT SENSOR REPLACEMENT**).

SUNLIGHT SENSOR REPLACEMENT

1. Remove the sunlight sensor (A) from the dashboard, then disconnect the 5P connector (B). Be careful not to damage the sensor and the dashboard.

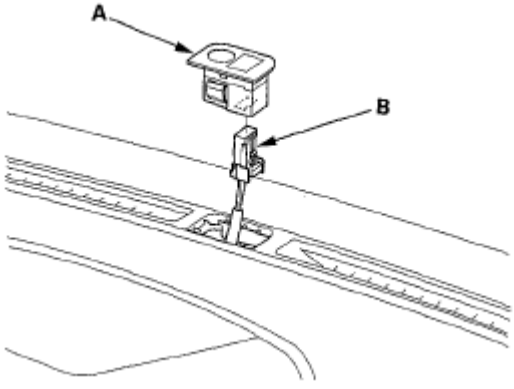


Fig. 166: Identifying Sunlight Sensor And 5P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the sensor in the reverse order of removal.

FRONT EVAPORATOR TEMPERATURE SENSOR TEST

1. Remove the evaporator front temperature sensor (see **FRONT EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
2. Dip the sensor in ice water, and measure the resistance between its terminals.

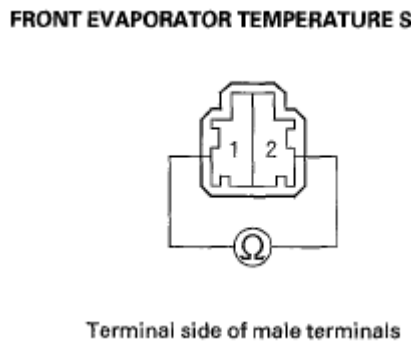


Fig. 167: Measuring Resistance Between Evaporator Front Temperature Sensor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Then pour warm water on the sensor, and check for a change in the resistance.
4. Compare the resistance readings with the specifications shown in the graph; the resistance should be within the specifications.

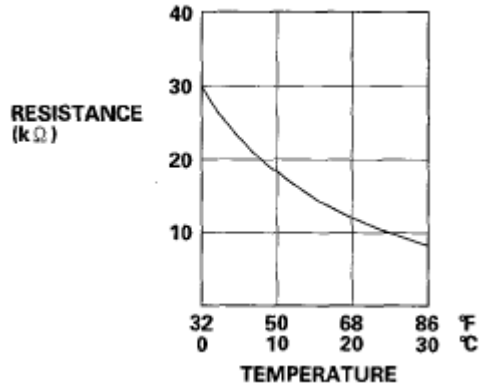


Fig. 168: Resistance To Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. If the resistance is not as specified, replace the front evaporator temperature sensor (see **FRONT EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).

FRONT EVAPORATOR TEMPERATURE SENSOR REPLACEMENT

1. Remove the driver's dashboard undercover (see **DRIVER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Remove the TPMS control unit (see **TPMS CONTROL UNIT REPLACEMENT**).
3. Disconnect the connector (A) from the front evaporator temperature sensor (B), then remove the connector clip (C). Remove the self-tapping screw and the front evaporator temperature sensor.

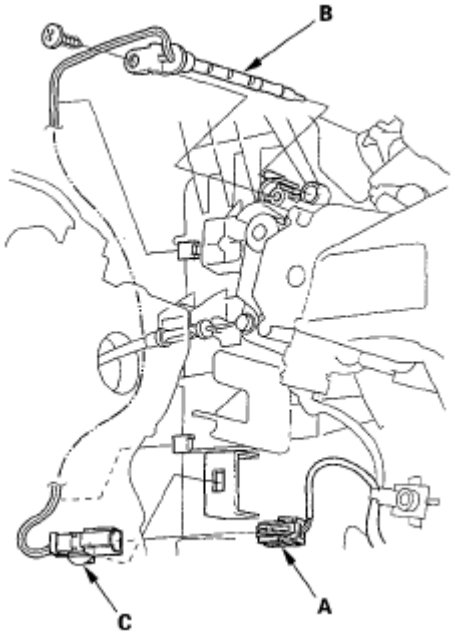


Fig. 169: Identifying Front Evaporator Temperature Sensor, Connector And Connector Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the sensor in the reverse order of removal.

FRONT POWER TRANSISTOR TEST

1. Remove the passenger's dashboard undercover (see **PASSENGER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector from the front power transistor.
3. Measure the resistance between the No. 3 and No. 4 terminals of the front power transistor. It should be about 1.5 kohms.
   - If the resistance is within the specifications, go to step 4.
   - If the resistance is not within the specifications, replace the front power transistor.

NOTE: Also check the front blower motor. Front power transistor failure can be caused by a defective front blower motor.

FRONT POWER TRANSISTOR

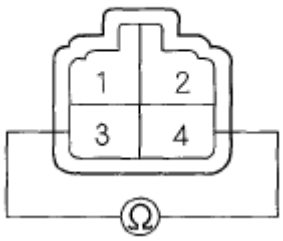


Fig. 170: Measuring Resistance Between No. 3 And No. 4 Terminals Of Front Power Transistor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Carefully release the lock tab on the No. 1 terminal (RED) (A) in the 4P connector, then remove the terminal and insulate it from body ground.

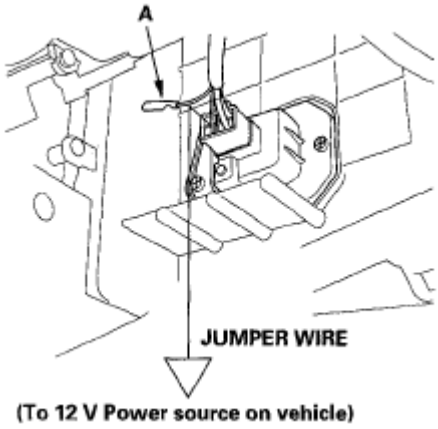


Fig. 171: Identifying 4P Connector Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reconnect the 4P connector to the front power transistor.
6. Make sure the RED wire is completely isolated, then supply 12 V to the No. 1 cavity with a jumper wire.
7. Turn the ignition switch to ON (II), and check that the front blower motor runs.
   - If the front blower motor does not run, replace the front power transistor.

NOTE: A faulty front blower motor can cause the front power transistor to fail. If the front power transistor is replaced, also check the front blower motor for binding, and replace it if necessary.

   - If the front blower motor runs, the front power transistor is OK.

DRIVER'S AIR MIX CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see GENERAL TROUBLESHOOTING INFORMATION).

1. Disconnect the 7P connector from the driver's air mix control motor.

NOTE: Incorrectly applying power and ground to the driver's air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the driver's air mix control motor, and ground the No. 2

terminal; the driver's air mix control motor should run, and stop at Max Cool. If it doesn't, reverse the connections; the driver's air mix control motor should run, and stop at Max Hot. When the driver's air mix control motor stops running, disconnect battery power immediately.

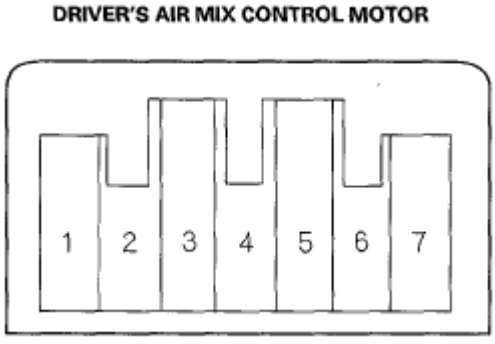


Fig. 172: Identifying Driver's Air Mix Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the driver's air mix control motor did not run in step 2, remove it, then check the driver's air mix control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**).
   - If the linkage or door sticks or binds, repair them as needed.
   - If the driver's air mix control motor runs smoothly, go to step 4.
4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the driver's air mix control motor 7P connector, then turn the ignition switch to ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

   Max Cool: about 0.5 V

   Max Hot: about 4.5 V

7. If either the resistance or voltage readings are not as specified, replace the driver's air mix control motor (see **DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

DRIVER'S AIR MIX CONTROL MOTOR REPLACEMENT

1. Remove the driver's dashboard undercover (see **DRIVER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the driver's air mix control motor (B). Remove the self-tapping screws and the driver's air mix control motor from the heater unit.

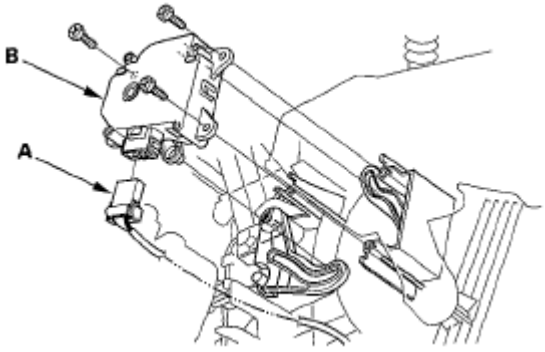


Fig. 173: Identifying Driver's Air Mix Control Motor And 7P Connector With Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

PASSENGER'S AIR MIX CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see GENERAL TROUBLESHOOTING INFORMATION).

1. Disconnect the 7P connector from the passenger's air mix control motor.

NOTE: Incorrectly applying power and ground to the passenger's air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the passenger's air mix control motor, and ground the No. 2 terminal; the passenger's air mix control motor should run, and stop at Max Cool. If it doesn't, reverse the connections; the passenger's air mix control motor should run, and stop at Max Hot. When the passenger's air mix control motor stops running, disconnect battery power immediately.

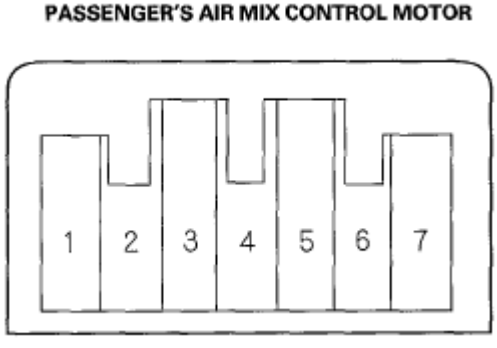


Fig. 174: Identifying Passenger's Air Mix Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the passenger's air mix control motor did not run in step 2, remove it, then check the passenger's air mix

control linkage and door for smooth movement.

- If the linkage and door move smoothly, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).
- If the linkage or door sticks or binds, repair them as needed.
- If the passenger's air mix control motor runs smoothly, go to step 4.

4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 k ohms.
5. Reconnect the passenger's air mix control motor 7P connector, then turn the ignition switch to ON (II).
6. Using the backprobe set, measure the voltage between the No. 3 and No. 5 terminals.

   Max Cool: about 1.5 V

   Max Hot: about 4.5 V

7. If either the resistance or voltage readings are not as specified, replace the passenger's air mix control motor (see **PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT**).

PASSENGER'S AIR MIX CONTROL MOTOR REPLACEMENT

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the passenger's air mix control motor (B). Remove the self-tapping screws and the passenger's air mix control motor from the heater unit.

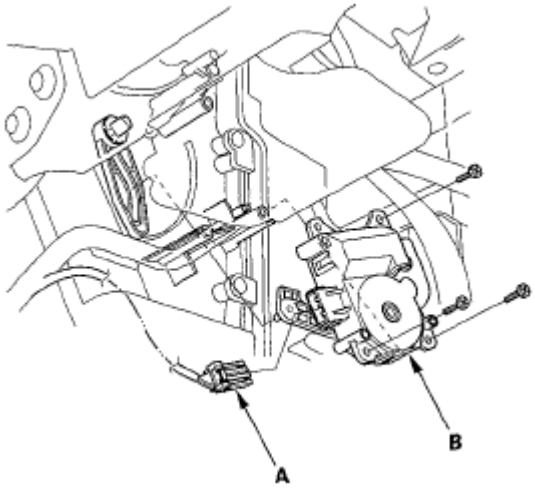


Fig. 175: Identifying Passenger's Air Mix Control Motor And 7P Connector With Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

FRONT MODE CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see GENERAL TROUBLESHOOTING INFORMATION).

1. Disconnect the 7P connector from the front mode control motor.

NOTE: Incorrectly applying power and ground to the front mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the front mode control motor, and ground the No. 2 terminal; the front mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the front mode control motor should run smoothly, and stop at Defrost. When the front mode control motor stops running, disconnect battery power immediately.

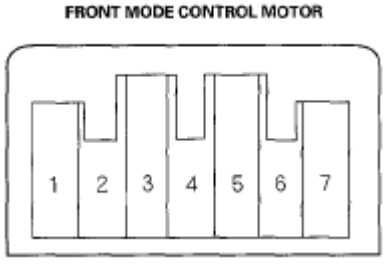


Fig. 176: Identifying Front Mode Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the front mode control motor did not run in step 2, remove it, then check the front mode control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the front mode control motor (see **FRONT MODE CONTROL MOTOR REPLACEMENT**).
   - If the linkage or doors stick or bind, repair them as needed.
   - If the front mode control motor runs smoothly, go to step 4.
4. Use a digital multimeter with an output of 1 mA or less at the 20 kohms range. With the front mode control motor running as in step 2, check for continuity between the No. 3, 4,5, and 6 terminals and the No. 7 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
5. If there is no continuity for a moment at each terminal, replace the front mode control motor (see **FRONT MODE CONTROL MOTOR REPLACEMENT**).

FRONT MODE CONTROL MOTOR REPLACEMENT

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the front mode control motor (B). Remove the self-tapping screws and the front mode control motor from the heater unit.

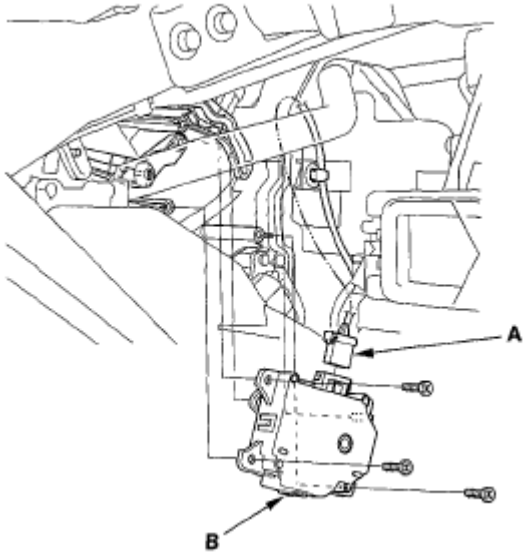


Fig. 177: Identifying Front Mode Control Motor And 7P Connector With Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

RECIRCULATION CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see GENERAL TROUBLESHOOTING INFORMATION).

1. Disconnect the 7P connector from the recirculation control motor.

NOTE: Incorrectly applying power and ground to the recirculation control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the recirculation control motor, and ground the No. 2 terminal; the recirculation control motor should run smoothly, and stop at Fresh. If it doesn't, reverse the connections; the recirculation control motor should run smoothly, and stop at Recirculate. When the recirculation control motor stops running, disconnect battery power immediately.

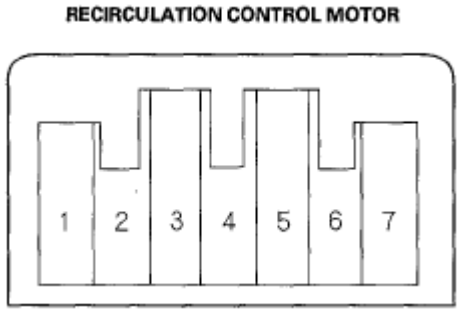


Fig. 178: Identifying Recirculation Control Motor Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the recirculation control motor did not run in step 2, remove it, then check the recirculation control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**).
   - If the linkage or door stick or bind, repair them as needed.
   - If the recirculation control motor runs smoothly, go to step 4.
4. Use a digital multimeter with an output of 1 mA or less at the 20 kohms range. With the recirculation control motor running as in step 2, check for continuity between the No. 3,4, and 5 terminals and the No. 7 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.
5. If there is no continuity for a moment at each terminal, replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**).

RECIRCULATION CONTROL MOTOR REPLACEMENT

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the heater unit.

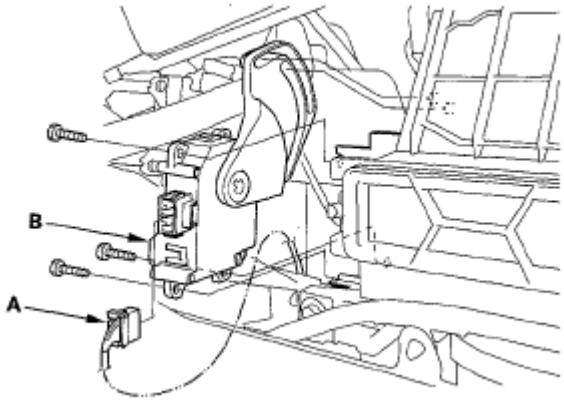


Fig. 179: Identifying Recirculation Control Motor And 7P Connector With Screws

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION

1. Remove the audio unit (see **AUDIO UNIT REMOVAL/INSTALLATION**).
2. Remove the self-tapping screws, bolts, brackets (A), and the climate control unit (B).

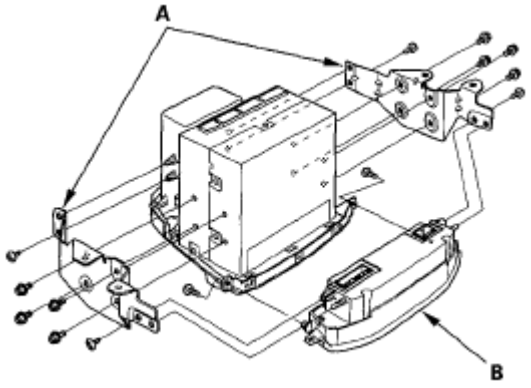


Fig. 180: Identifying Self-Tapping Screws, Bolts, Brackets And Climate Control Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the control unit in the reverse order of removal. After installation, operate the various functions to see whether works properly.
4. Run the self-diagnostic function to confirm that there are no problems in the system (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION WITHOUT THE HDS**).

DUST AND POLLEN FILTER REPLACEMENT

1. Open the glove box. Remove the glove box stop on right side, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Remove the dust and pollen filter assembly (A) from the blower unit.

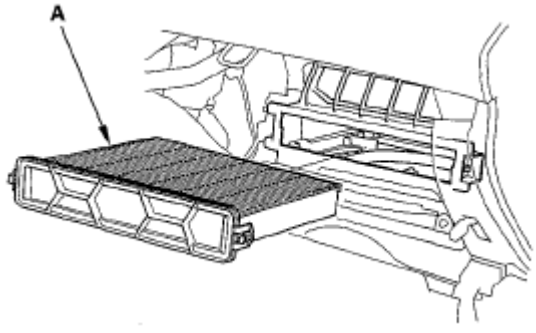


Fig. 181: Identifying Dust And Pollen Filter Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the filter (A) from the housing (B), and replace the filter.

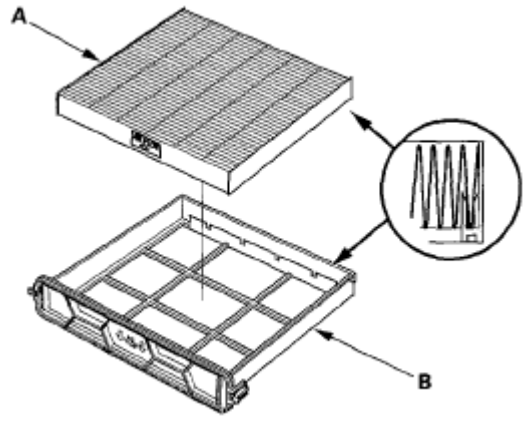


Fig. 182: Identifying Filter And Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the filter in the reverse order of removal. Make sure that there is no air leaking out of the blower unit.

BLOWER UNIT REMOVAL/INSTALLATION

1. Remove the glove box (see **GLOVE BOX REMOVAL/INSTALLATION**).
2. Remove the harness clips (A), the bolts, and the glove box frame (B).

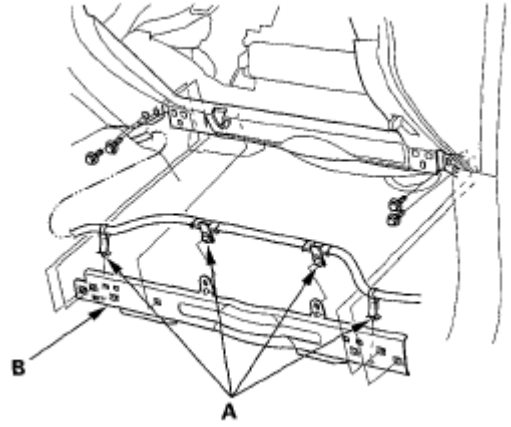


Fig. 183: Identifying Harness Clips And Glove Box Frame With Bolts
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Cut the plastic cross brace (A) in the glove box opening with diagonal cutters in the area shown, and discard it.

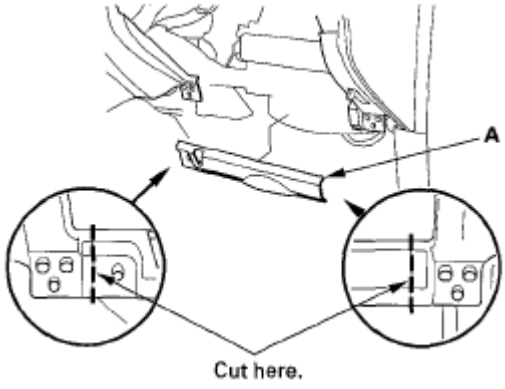


Fig. 184: Identifying Plastic Cross Brace Cutting Area
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the wire harness clips (A), the self-tapping screws, and the passenger's heater duct (B).

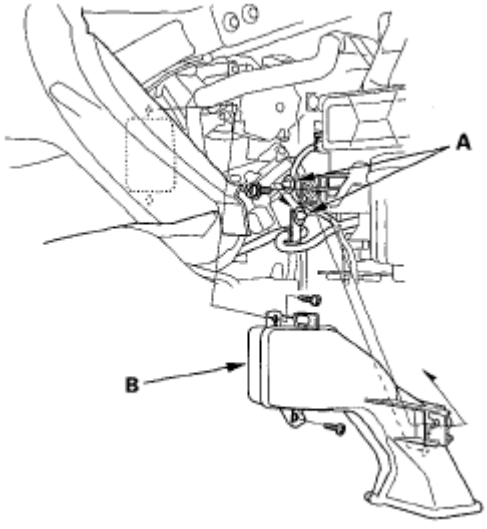


Fig. 185: Identifying Wire Harness Clips And Passenger'sHeater Duct With Screws
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the connector (A) from the front blower motor. Remove the wire harness clips (B).

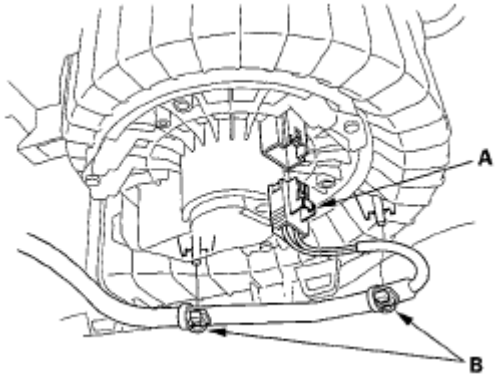


Fig. 186: Identifying Front Blower Motor Connector And Wire Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the connectors (A) from the recirculation control motor and adaptive front lighting control unit, then remove the harness clip (B). Remove the self-tapping screws, the mounting nuts, and the blower unit (C).

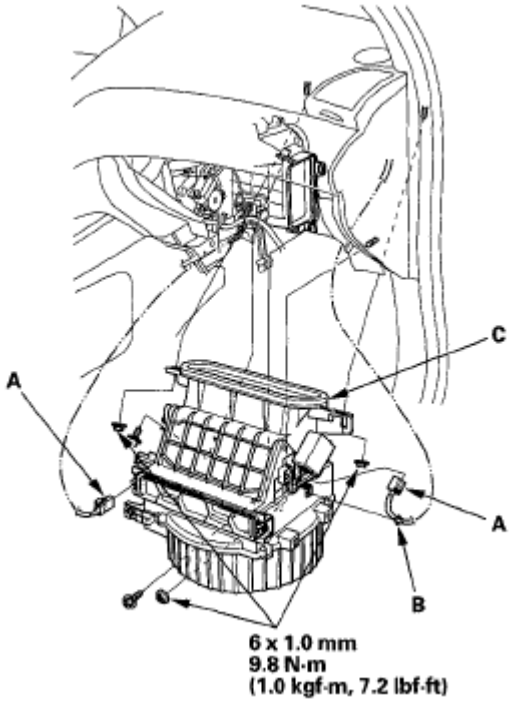


Fig. 187: Identifying Recirculation Control Motor Connector, Harness Clip And Blower Unit With Screws With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the unit in the reverse order of removal. Make sure that there is no air leakage.

BLOWER UNIT COMPONENT REPLACEMENT

Note these items when overhauling the blower unit:

- The recirculation control motor (A), front blower motor (B) and the dust and pollen filter (C) can be replaced without removing the blower unit.
- Before reassembly, make sure that the recirculation control linkage and door move smoothly without binding.
- After reassembly, make sure the recirculation control motor runs smoothly (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**).

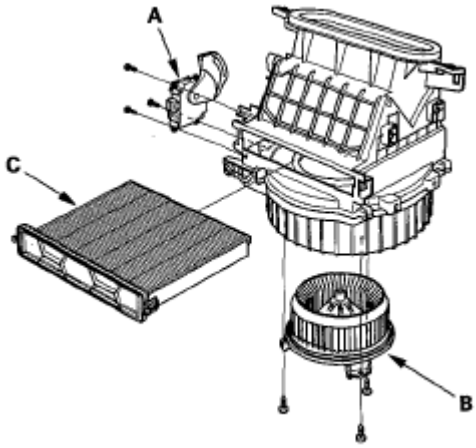


Fig. 188: Identifying Recirculation Control Motor, Front Blower Motor And Dust And Pollen Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

FRONT EXPANSION VALVE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the front evaporator core (see **FRONT EVAPORATOR CORE REPLACEMENT**).
3. Remove the bolts, then remove the front expansion valve (A) and O-rings (B).

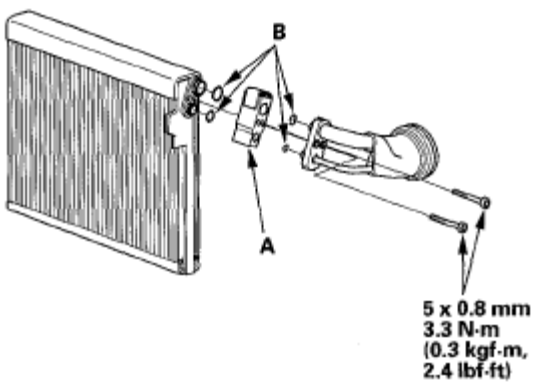


Fig. 189: Identifying Front Expansion Valve And O-Rings Bolts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the front expansion valve in the reverse order of removal, and note these items:
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
   - Make sure that there is no air leakage.
   - Charge the system (see **SYSTEM CHARGING**).

FRONT EVAPORATOR CORE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the bolts.

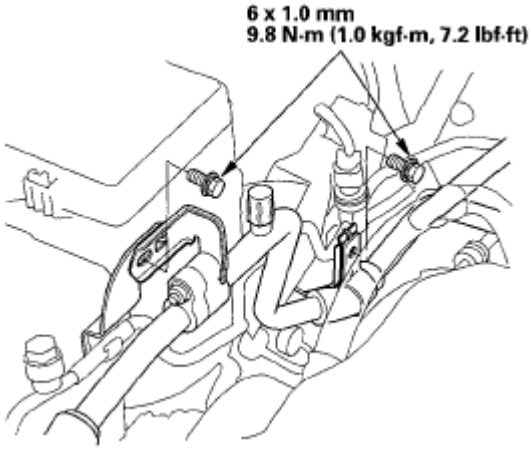


Fig. 190: Identifying Front Evaporator Core Bolts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts, then disconnect the front receiver line (A) and the front suction line (B) from the front evaporator core.

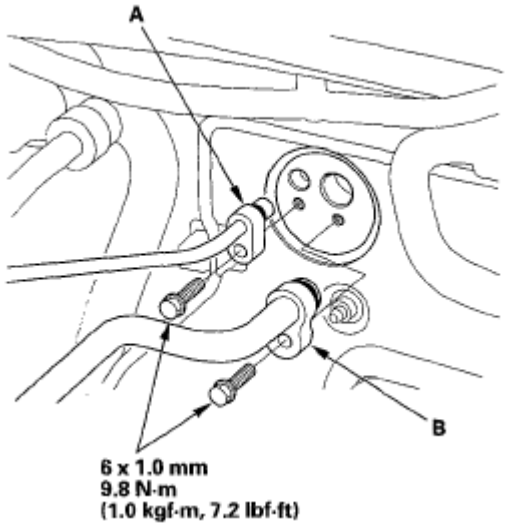


Fig. 191: Identifying Front Receiver Line And Front Suction Line Bolts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the blower unit (see **BLOWER UNIT REMOVAL/INSTALLATION**).
5. Disconnect the connector (A) from the front power transistor, then remove the harness clip (B). Remove the self-tapping screws, the expansion valve cover (C), and the seal (D).

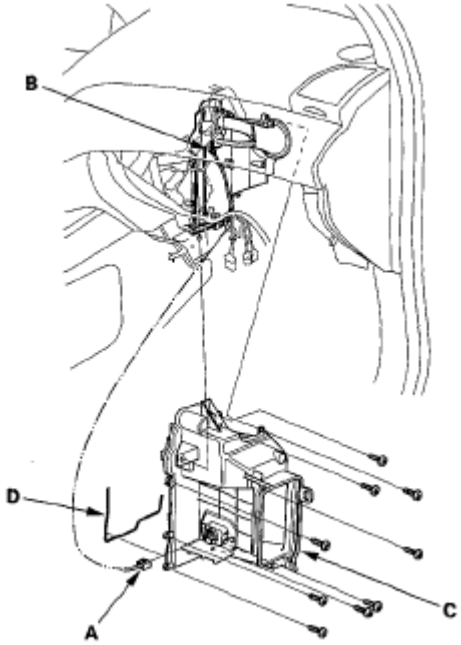


Fig. 192: Identifying Front Power Transistor Connector, Harness Clip, Expansion Valve Cover And Seal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the bolts, the inlet and outlet pipes (A), and expansion valve (B). Carefully pull out the front

evaporator core (C), then remove the plate (D).

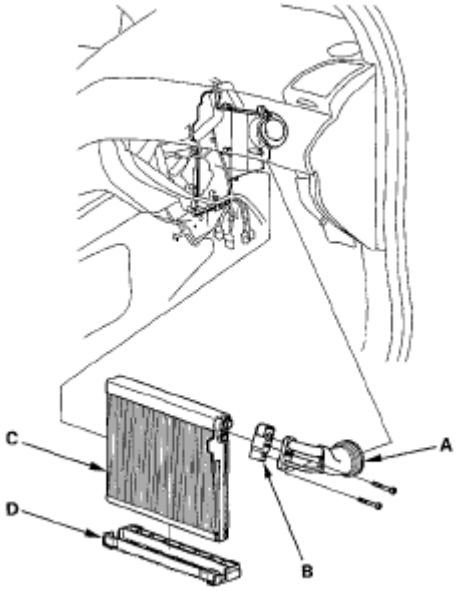


Fig. 193: Identifying Inlet And Outlet Pipes, Expansion Valve. Front Evaporator Core And Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the core in the reverse order of removal, and note these items:
   - If you're installing a new front evaporator core, add refrigerant oil (DENSO ND-OIL 8) (see **A/C SERVICE TIPS AND PRECAUTIONS**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
   - Make sure that there is no air leakage.
   - Charge the system (see **SYSTEM CHARGING**).

HEATER UNIT/CORE REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) before doing repairs or service.

1. Do the battery terminal disconnection procedure.(see **BATTERY TERMINAL DISCONNECTION AND RECONNECTION**).
2. Disconnect the front receiver line and front suction line from the front evaporator core (see **FRONT EVAPORATOR CORE REPLACEMENT**).

3. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C). Turn the heater valve arm to the fully opened position as shown.

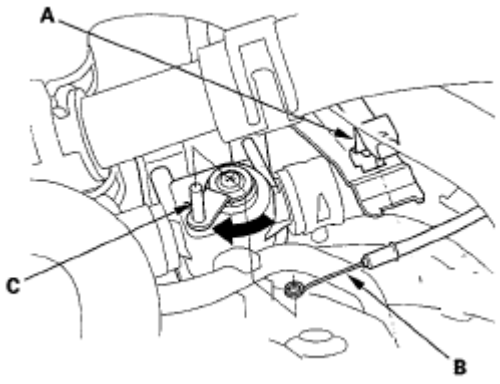


Fig. 194: Turning Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. When the engine is cool, drain the engine coolant from the radiator (see **COOLANT CHECK**).
5. Remove the clamp (A). Slide the hose clamps (B) back. Remove the nut and the water valve (C), then disconnect the inlet heater hose (D) and the outlet heater hose (E) from the heater unit. Engine coolant will run out when the hoses are disconnected; drain it into a clean drip pan. Be sure not to let coolant spill on the electrical parts or the painted surfaces. If any coolant spills, rinse it off immediately.

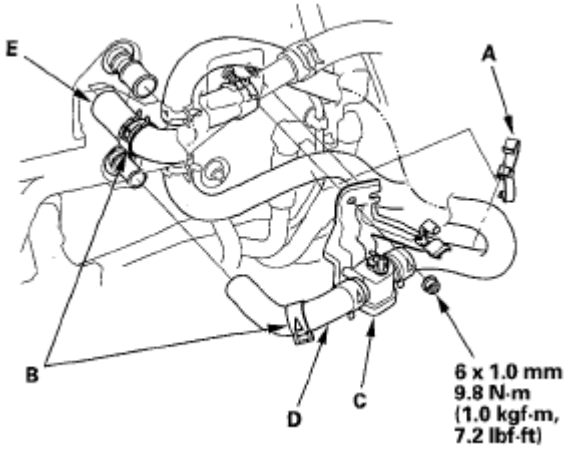


Fig. 195: Identifying Clamp, Slide Hose Clamps, Water Valve, Heater Hose And Outlet Heater Hose Nut With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the mounting nuts from the heater unit. Take care not to damage or bend the fuel lines or brake lines, etc.

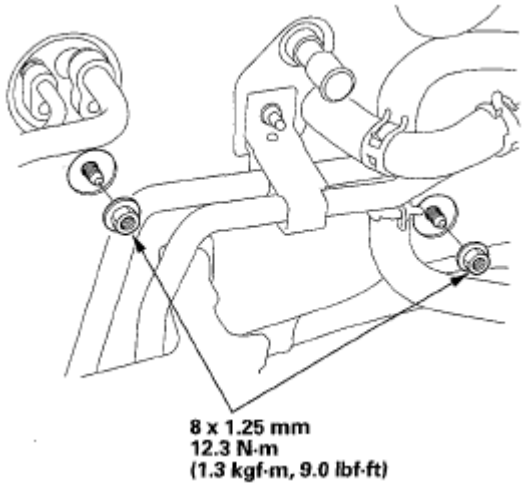


Fig. 196: Identifying Heater Unit Mounting Nuts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the dashboard (see **DASHBOARD REPLACEMENT**).
8. Disconnect the connector (A) from the front blower motor. Remove the wire harness clips (B).

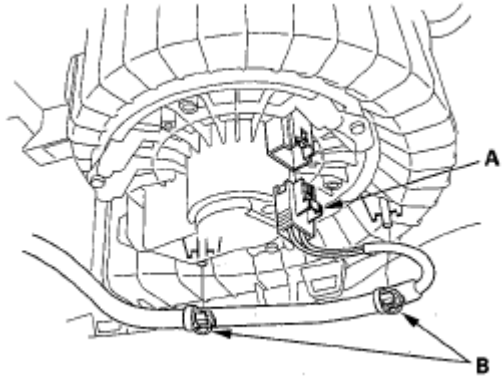


Fig. 197: Identifying Front Blower Motor Connector And Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the connector (A) from the adaptive front lighting control unit, then remove the harness clip (B).

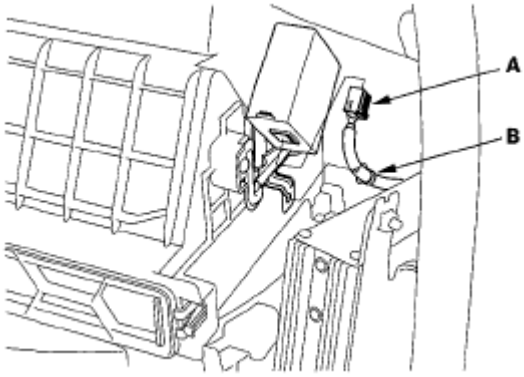


Fig. 198: Identifying Adaptive Front Lighting Control Unit Connector And Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the connectors (A) from the front mode control motor, the passenger's air mix control motor, the recirculation control motor, and the front power transistor. Remove the wire harness clips (B).

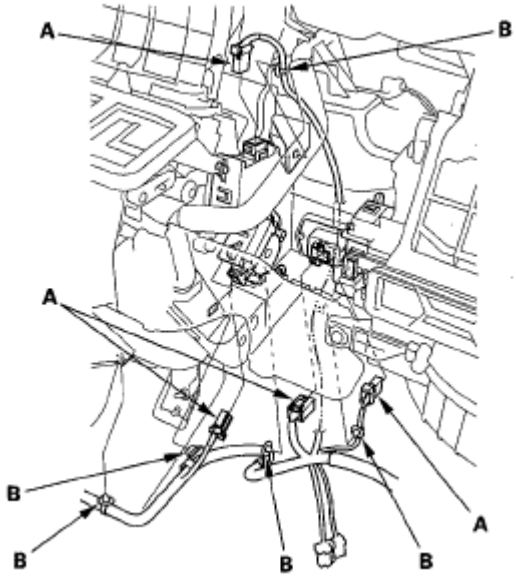


Fig. 199: Identifying Front Mode Control Motor Connector And Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the connectors (A) from the driver's air mix control motor and the front evaporator temperature sensor. Remove the wire harness clips (B) and the wire harness (C).

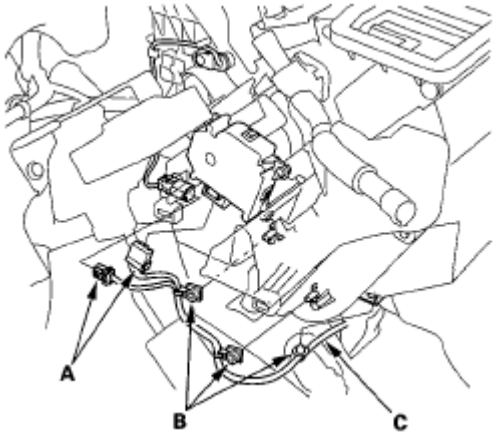


Fig. 200: Identifying Driver's Air Mix Control Motor Connector And Wire Harness Clips And Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Turn over the carpet. Remove the wire harness clips (A), the rear heater duct mounting clips (B), and the rear heater duct (C).

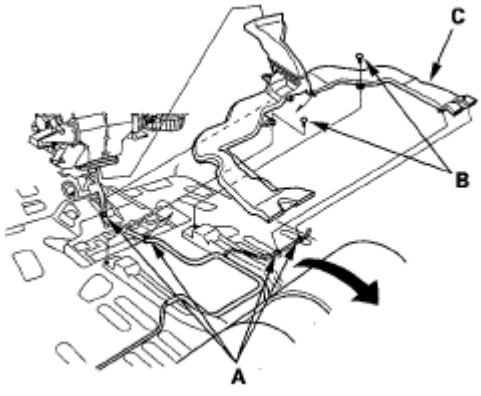


Fig. 201: Identifying Wire Harness Clips
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the mounting nuts. Slide the blower-heater unit (A), then remove the drain hose (B) and blower-heater unit.

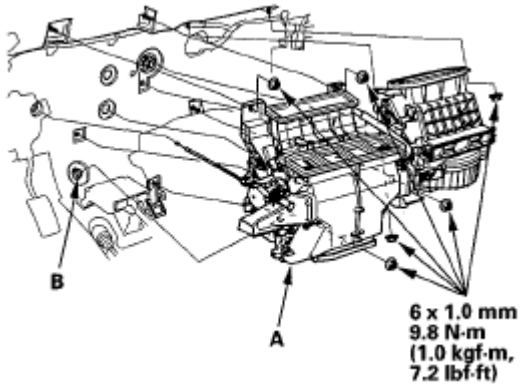


Fig. 202: Identifying Blower-Heater Unit And Drain Hose With Mounting Nuts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Remove the self-tapping screws and the passenger's heater duct (A). Remove the self-tapping screws and the expansion valve cover (B). Remove the self-tapping screw and the front heater core cover (C). Remove the self-tapping screws, the heater pipe brackets (D), the grommets (E), and carefully pull out the front heater core (F).

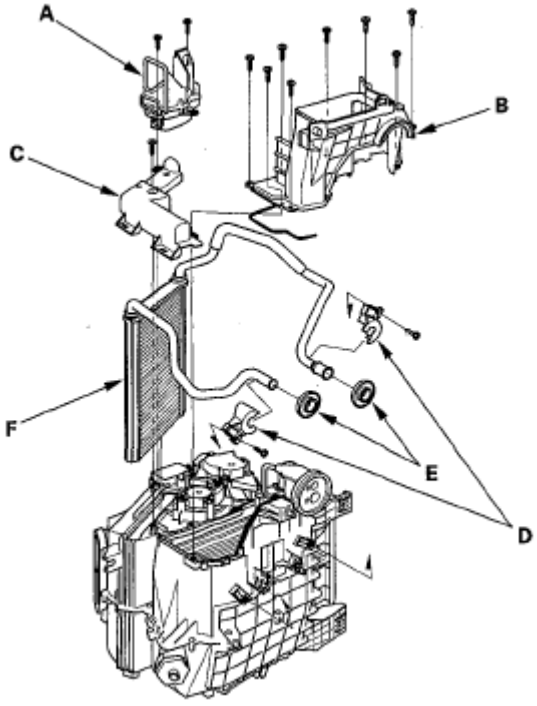


Fig. 203: Identifying Passenger's Heater Duct, Expansion Valve Cover, Front Heater Core Cover And Grommets
Courtesy of AMERICAN HONDA MOTOR CO., INC.

15. Install the front heater core, and the front evaporator core in the reverse order of removal.
16. Install the heater unit in the reverse order of removal, and note these items:

- Do not interchange the inlet and outlet heater hoses, and install the hose clamps securely.
- Refill the cooling system with engine coolant (see **COOLANT CHECK**).
- Adjust the heater valve cable (see **HEATER VALVE CABLE ADJUSTMENT**).
- Make sure that there is no coolant leakage.
- Make sure that there is no air leakage.
- Refer to the **FRONT EVAPORATOR CORE REPLACEMENT** .

17. Do the battery terminal reconnection procedure.(see **BATTERY TERMINAL DISCONNECTION AND RECONNECTION**).

HEATER VALVE CABLE ADJUSTMENT

1. From under the hood, open the cable clamp (A), then disconnect the heater valve cable (B) from the heater valve arm (C).

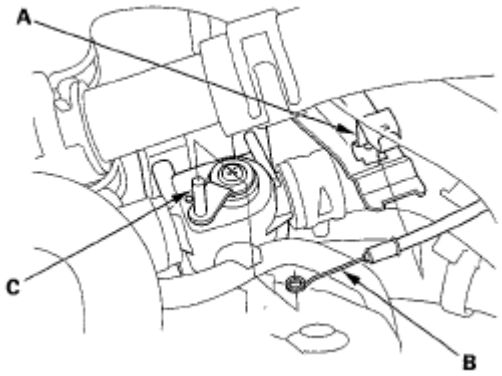


Fig. 204: Identifying Cable Clamp, Heater Valve Cable And Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. From under the dash, disconnect the heater valve cable housing from the cable clamp (A), and disconnect the heater valve cable (B) from the driver's air mix control linkage (C).

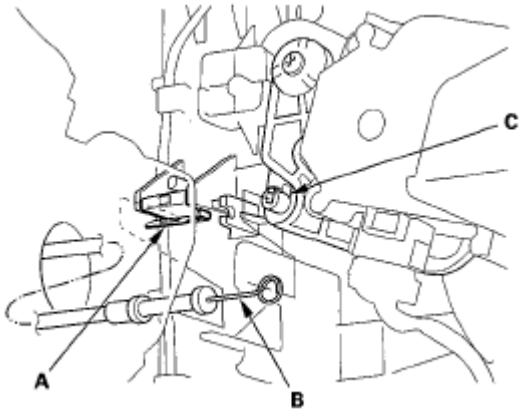


Fig. 205: Identifying Cable Clamp, Heater Valve Cable And Driver's Air Mix Control Linkage

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Set the temperature control dial to Max Cool (Lo) with the ignition switch to ON (II).
4. Attach the heater valve cable (B) to the driver's air mix control linkage (C) as shown step 2. Snap the heater valve cable housing into the cable clamp (A).

NOTE: Make sure the ring-end of the cable is pushed all the way to the base of the pin on driver's air mix control linkage.

5. From under the hood, turn the heater valve arm (A) to the fully closed position as shown, and hold it. Attach the heater valve cable (B) to the heater valve arm, and gently pull on the heater valve cable housing to take up any slack, then install the heater valve cable housing into the cable clamp (C).

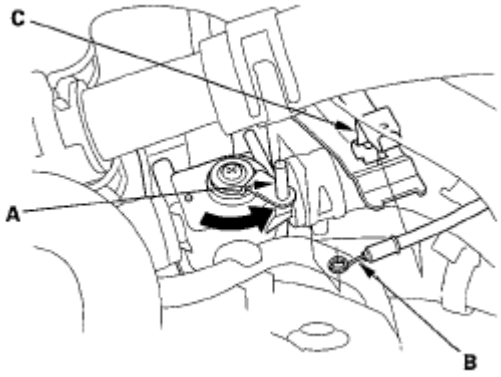


Fig. 206: Identifying Heater Valve Arm
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR REPLACEMENT

NOTE: Do not install the A/C compressor into a system unless you are completely sure that the system is free of contamination. Installing the A/C compressor into a contaminated system can result in premature A/C compressor failure.

1. If the A/C compressor is marginally operable, run the engine at idle speed, and let the air conditioning work for a few minutes, then shut the engine off.
2. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
3. Remove the drive belt (see **DRIVE BELT INSPECTION**).
4. Remove the front splash shield (see **SPLASH SHIELD REPLACEMENT**).
5. Remove the front undercover (see **FRONT UNDERCOVER REPLACEMENT**).
6. Support the front subframe with the engine support. Remove the bolts and the front subframe stiffener (A).

NOTE: Install the new front subframe mounting bolt(B).

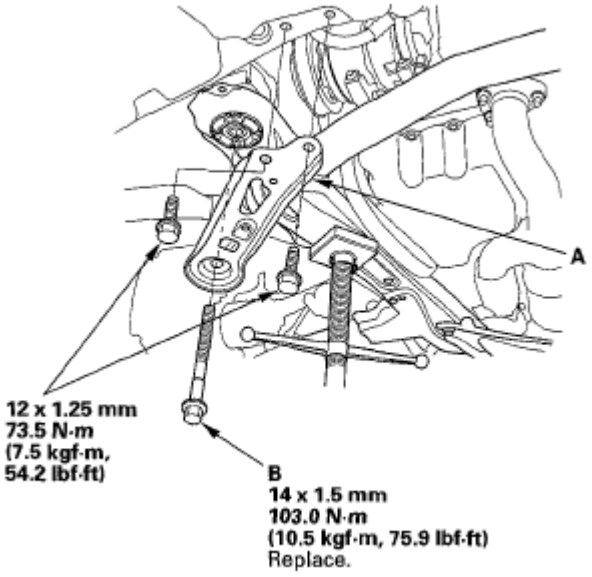


Fig. 207: Identifying Front Subframe Stiffener And Mounting Bolts With Torque Specifications
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Disconnect the A/C compressor clutch connector (A). Remove the bolts and the nut, then disconnect the suction hose (B) and discharge hose (C) from the A/C compressor. Plug or cap the lines immediately after disconnecting them to avoid moisture and dust contamination.

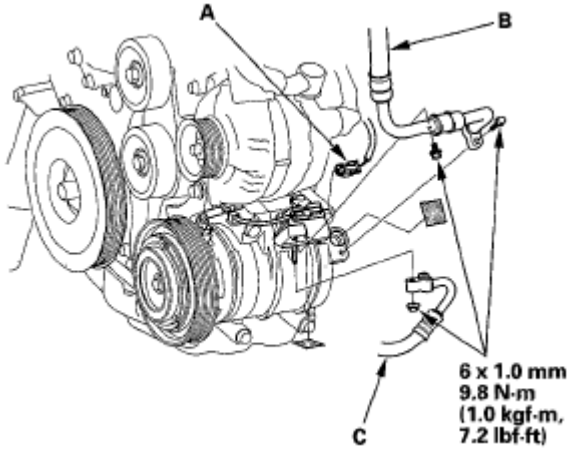


Fig. 208: Identifying A/C Compressor Clutch Connector, Suction Hose And Discharge Hose With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Remove the mounting bolts and the A/C compressor (A). Be careful not to damage the radiator fins when removing the compressor.

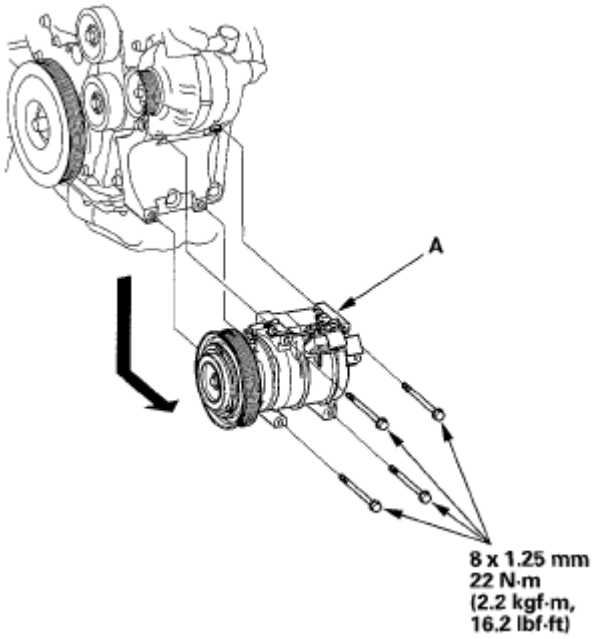


Fig. 209: Identifying Mounting Bolts And A/C Compressor With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the A/C compressor in the reverse order of removal, and note these items:
   - Inspect the A/C lines for any signs of contamination.
   - If you're installing a new A/C compressor, you must calculate the amount of refrigerant oil to be removed from it (see **A/C REFRIGERANT OIL REPLACEMENT**). A new A/C compressor comes with a full charge of oil.
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Use refrigerant oil (DENSO ND-OIL 8) for HFC-134a DENSO piston type A/C compressor only.
   - To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts the paint, wash it off immediately.
   - Be careful not to damage the radiator fins when installing the compressor and the A/C condenser fan shroud.
   - Charge the system (see **SYSTEM CHARGING**).

A/C COMPRESSOR CLUTCH CHECK

1. Check the pressure plate for discoloration, peeling, or other damage. If there is damage, replace the clutch set (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

2. Check the pulley bearing play and drag by rotating the pulley by hand. Replace the clutch set with a new one if it is noisy or has excessive play/drag (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

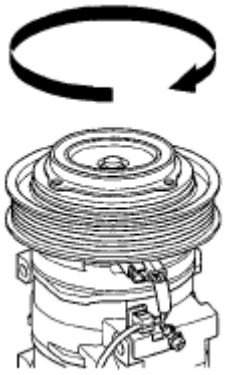


Fig. 210: Identifying Bearing Play
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the clearance between the pulley (A) and the pressure plate (B) all the way around. If the clearance is not within specified limits, remove the pressure plate (see **A/C COMPRESSOR CLUTCH OVERHAUL**) and add or remove shims as needed to increase or decrease clearance.

   Clearance: 0.30-0.60 mm (0.012-0.024 in.)

   NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm, and 0.5 mm.

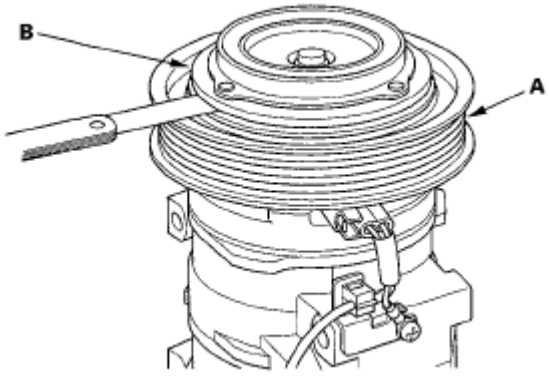


Fig. 211: Measuring Clearance Between Pulley And Pressure Plate
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Measure the resistance of the field coil. If the resistance is not within specifications, replace the field coil (see **A/C COMPRESSOR CLUTCH OVERHAUL**).

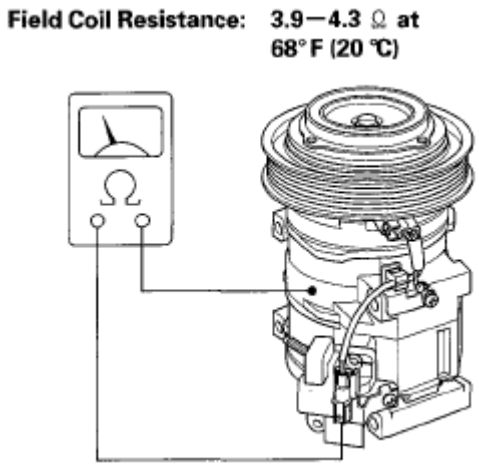


Fig. 212: Measuring Resistance Of Field Coil
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C COMPRESSOR CLUTCH OVERHAUL

Special Tools Required

A/C clutch holder, Robin air 10204 or Kent-Moore J37872, or Honda Tool and Equipment KMT-J33939, commercially available

1. Remove the center bolt while holding the pressure plate (A) with a commercially available A/C clutch holder (B).

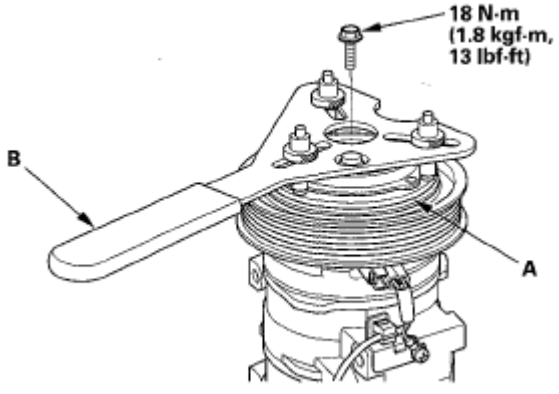


Fig. 213: Identifying Center Bolt While Holding Pressure Plate With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the pressure plate (A) and shim(s) (B), taking care not to lose the shim(s). If the clutch needs adjustment, increase or decrease the number and thickness of shims as necessary, then reinstall the pressure plate, and recheck its clearance (see **A/C COMPRESSOR CLUTCH CHECK**).

NOTE: The shims are available in three thicknesses: 0.1 mm, 0.3 mm, and 0.5 mm.

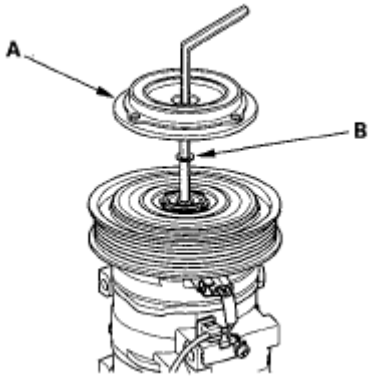


Fig. 214: Identifying Pressure Plate And Shim
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If you are replacing the field coil, remove the snap ring (A) with snap ring pliers, then remove the pulley (B). Be careful not to damage the pulley or the A/C compressor.

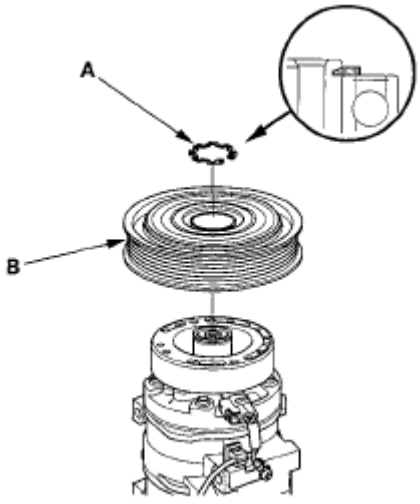


Fig. 215: Identifying Snap Ring And Pulley
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the screw from the field coil ground terminal (A) and bracket (B). Disconnect the connector (C) from the field coil, then remove the wire harness clip (D). Remove the snap ring (E) with snap ring pliers, then remove the field coil (F). Be careful not to damage the field coil or the A/C compressor.

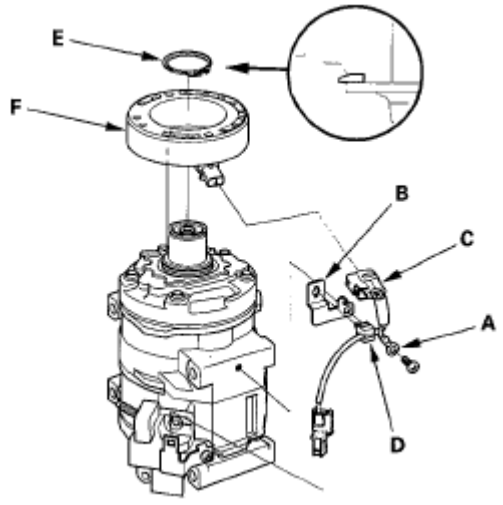


Fig. 216: Identifying Field Coil Ground Terminal, Bracket, Connector, Wire Harness Clip And Snap Ring
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reassemble the clutch in the reverse order of disassembly, and note these items:
   - Install the field coil with the wire side facing down, and align the boss on the field coil with the hole in the A/C compressor.
   - Clean the pulley and A/C compressor sliding surfaces with contact cleaner or other non-petroleum solvent.
   - Install new snap rings, note the installation direction, and make sure they are fully seated in the groove.
   - Make sure that the pulley turns smoothly after it's reassembled.
   - Route and clamp the wires properly or they can be damaged by the pulley.

A/C COMPRESSOR RELIEF VALVE REPLACEMENT

1. Recover the refrigerant with a recovery/recycling/ charging station (see **REFRIGERANT RECOVERY**).
2. Remove the front splash shield (see **SPLASH SHIELD REPLACEMENT**).
3. Remove the front undercover (see **FRONT UNDERCOVER REPLACEMENT**).
4. Remove the relief valve (A) and the O-ring (B). Plug the opening to keep foreign matter from entering the system and the A/C compressor oil from running out.

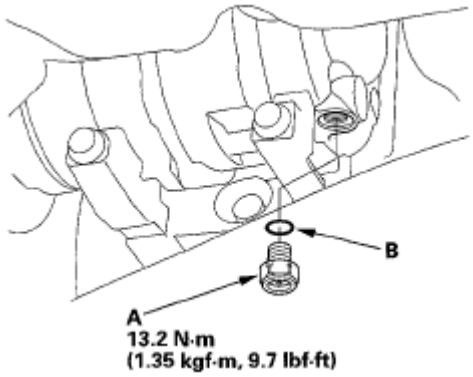


Fig. 217: Identifying Relief Valve And O-Ring With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Clean the mating surfaces.
6. Replace the O-ring with a new one at the relief valve, and apply a thin coat of refrigerant oil before installing it.
7. Remove the plug, and install and tighten the relief valve.
8. Charge the system (see **SYSTEM CHARGING**).

A/C CONDENSER REPLACEMENT

1. Recover the refrigerant with a recovery/recycling charging station (see **REFRIGERANT RECOVERY**).
2. Remove the front bumper (see **FRONT BUMPER REMOVAL/INSTALLATION**).
3. Remove the bolt, then disconnect the discharge hose (A) from the A/C condenser.

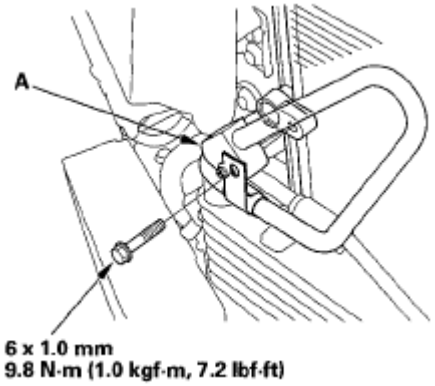


Fig. 218: Identifying A/C Condenser Discharge Hose Bolt With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the bolt, then disconnect the front receiver line (A) from the A/C condenser.

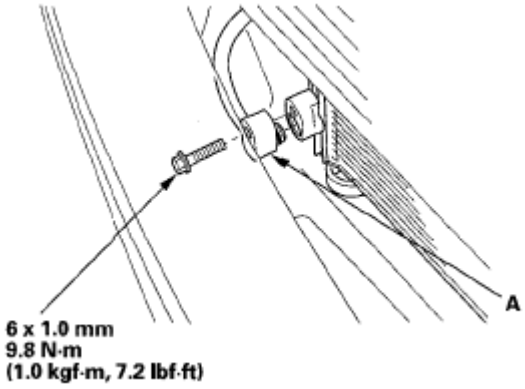


Fig. 219: Identifying A/C Condenser Front Receiver Line With Bolt With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Remove the bolts, nut, and the ATF cooler bracket (A).

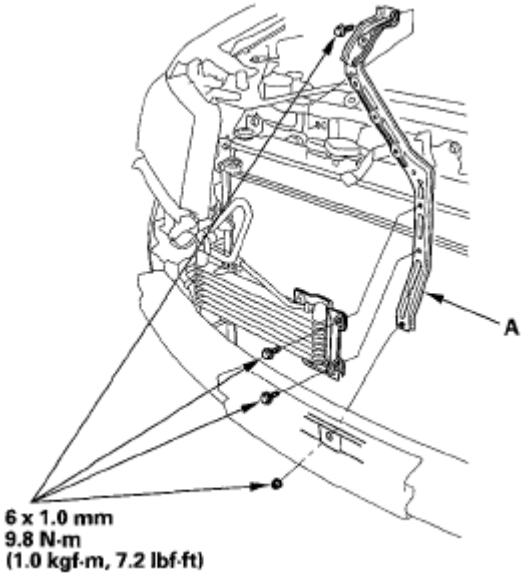


Fig. 220: Identifying ATF Cooler Bracket Nut And Bolts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Loosen the bolts, then remove the A/C condenser upper mount brackets (A).

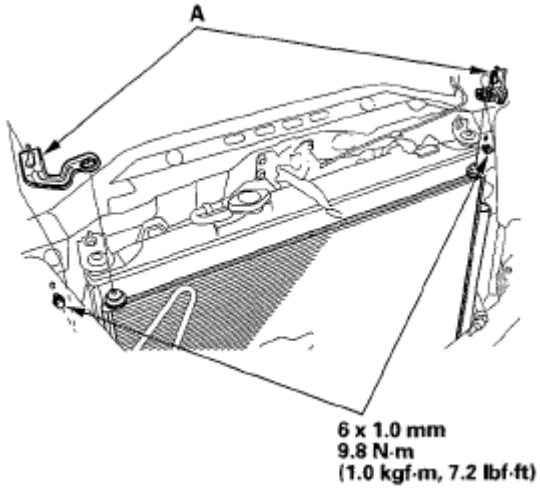


Fig. 221: Identifying A/C Condenser Upper Mount Brackets Bolts With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the hood latch (see **HOOD LATCH REPLACEMENT**).
8. Remove the A/C condenser (A) by lifting it up. Be careful not to damage the radiator and A/C condenser fins when removing the A/C condenser.

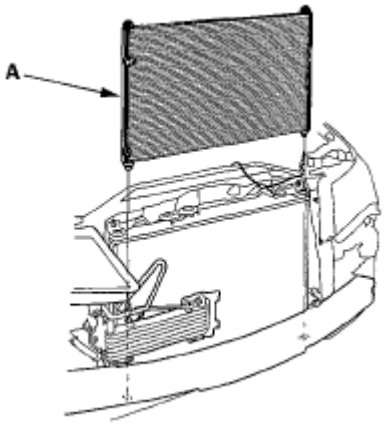


Fig. 222: Identifying A/C Condenser
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the A/C condenser in the reverse order of removal, and note these items:
   - If you're installing a new A/C condenser, add refrigerant oil (DENSO ND-OIL 8) (see **A/C REFRIGERANT OIL REPLACEMENT**).
   - Replace the O-rings with new ones at each fitting, and apply a thin coat of refrigerant oil before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Immediately after using the oil, reinstall the cap on the container, and seal it to avoid moisture absorption.
   - Do not spill the refrigerant oil on the vehicle; it may damage the paint; if the refrigerant oil contacts

the paint, wash it off immediately.

- Be careful not to damage the radiator or the A/C condenser fins when installing the A/C condenser.
- Charge the system (see **SYSTEM CHARGING**).
- Adjust the hood latch (see **HOOD ADJUSTMENT**).

RECEIVER/DRYER DESICCANT REPLACEMENT

NOTE: Install the receiver/dryer as quickly as possible to prevent the system from absorbing moisture from the air.

1. Remove the A/C condenser (see **A/C CONDENSER REPLACEMENT**).
2. Remove the cap (A) from the bottom of the A/C condenser. Remove the O-ring (B) and the desiccant (C).

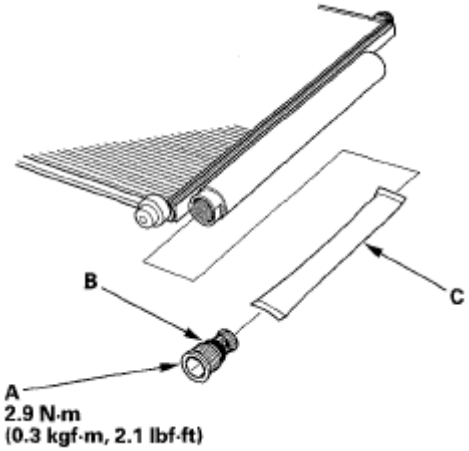


Fig. 223: Identifying A/C Condenser Cap, O-Ring And Desiccant With Torque Specification
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the receiver/dryer in the reverse order of removal, and note these items:
   - Replace the O-rings with new ones, and apply a thin coat of refrigerant oil (DENSO ND-OIL 8) before installing them. Be sure to use the correct O-rings for HFC-134a (R-134a) to avoid leakage.
   - Install the cap to the specified torque. It is made of resin and can be easily stripped.

REFRIGERANT RECOVERY

CAUTION:
- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

NOTE:
- **If accidental system discharge occurs, ventilate the work area before**

resuming service.

- **Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.**

1. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

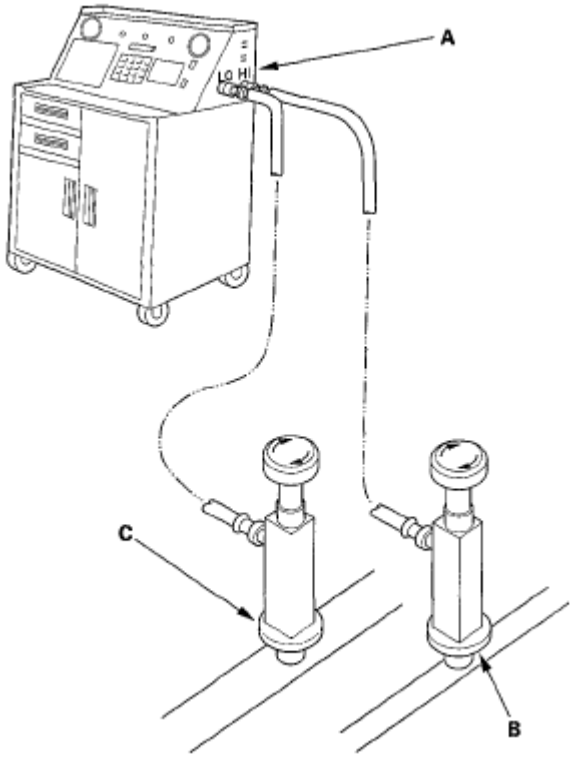


Fig. 224: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High And Low Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Measure the amount of refrigerant oil removed from the A/C system after the recovery process is completed. Be sure to put the same amount of new refrigerant oil back into the A/C system before charging.

SYSTEM EVACUATION

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

NOTE:

- **If accidental system discharge occurs, ventilate the work area before resuming service.**
- **Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.**

1. When an A/C System has been opened to the atmosphere, such as during installation or repair, it must be evacuated using an R-134a refrigerant recovery/recycling/charging station. If the system has been open for several days, the receiver/dryer should be replaced, and the system should be evacuated for several hours.
2. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions. Evacuate the system.

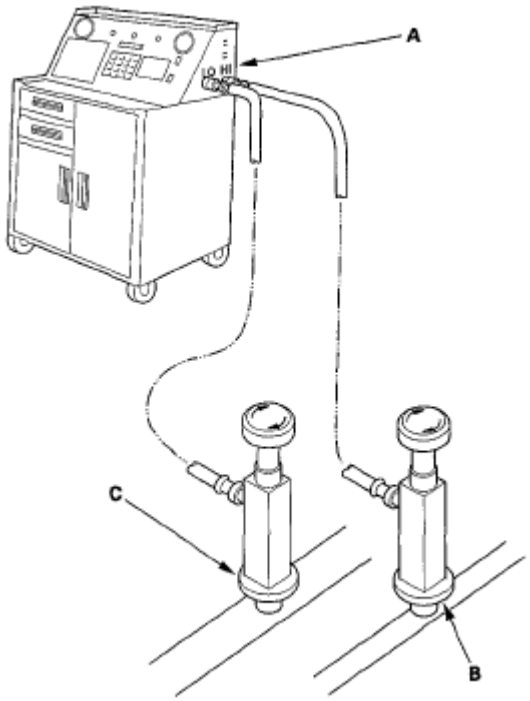


Fig. 225: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High And Low Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the low-pressure does not reach more than 93.3 kPa (700 mmHg, 27.6 in.Hg) in 15 minutes, there is probably a leak in the system. Partially charge the system, and check for leaks (see step 3 on **REFRIGERANT LEAK TEST**).

SYSTEM CHARGING

CAUTION:
- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**

- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

NOTE:

- **If accidental system discharge occurs, ventilate the work area before resuming service.**
- **Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.**

1. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

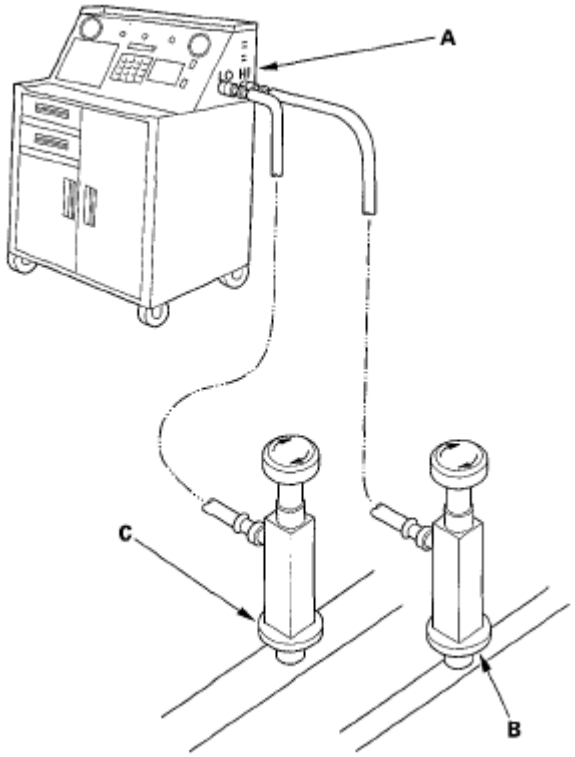


Fig. 226: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High And Low Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Evacuate the system (see **SYSTEM EVACUATION**).
3. Add the same amount of new refrigerant oil to the system that was removed during recovery. Use only DENSO ND-OIL 8 refrigerant oil.
4. Charge the system with the specified amount of R-134a refrigerant. Do not overcharge the system; the A/C compressor will be damaged.

   Select the appropriate units of measure for your refrigerant charging station.

Refrigerant Capacity:

600 to 650 g

0.60 to 0.65 kg

1.32 to 1.43 lbs

21.2 to 22.9 oz

5. Check for refrigerant leaks (see **REFRIGERANT LEAK TEST**).
6. Check the system performance (see **A/C SYSTEM TEST**).

REFRIGERANT LEAK TEST

SPECIAL TOOLS REQUIRED

Leak detector, Honda Tool and Equipment YGK-H-10PM or commercially available

CAUTION:
- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

NOTE:
- **If accidental system discharge occurs, ventilate the work area before resuming service.**
- **Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.**

1. Connect an R-134a refrigerant recovery/recycling/ charging station (A) to the high-pressure service port (B) and the low-pressure service port (C), as shown, following the equipment manufacturer's instructions.

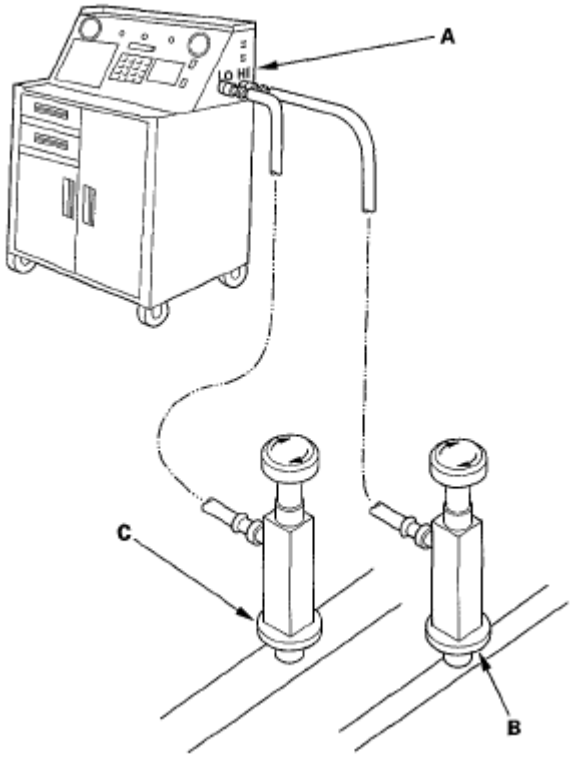


Fig. 227: Connecting R-134A Refrigerant Recovery/Recycling/ Charging Station To High And Low Pressure Service Port
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Open the high pressure valve to charge the system to the specified capacity, then close the supply valve, and disconnect the charging station fittings.

   Select the appropriate units of measurement for your refrigerant charging station.

   Refrigerant Capacity:

   600 to 650 g

   0.60 to 0.65 kg

   1.32 to 1.43 lbs

   21.2 to 22.9 oz

3. Check the system for leaks using an R-134a refrigerant leak detector with an accuracy of 14 g (0.5 oz) per year or better.
4. If you find leaks that require the system to be opened (to repair or replace hoses, fittings, etc.), do the refrigerant recovery.
5. After checking and repairing leaks, the system must be evacuated.

A/C SYSTEM TEST

PERFORMANCE TEST

CAUTION:
- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

The performance test will help determine if the A/C system is operating within specifications.

NOTE:
- **If accidental system discharge occurs, ventilate the work area before resuming service.**
- **Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.**

1. Connect an R-134a refrigerant recovery/recycling/ charging station to the high-pressure service port and the low-pressure service port, following the equipment manufacturer's instructions.
2. Determine the relative humidity and air temperature.
3. Open the glove box. Remove the glove box stop on right side, then let the glove box hang down (see **GLOVE BOX REMOVAL/INSTALLATION**).
4. Insert a thermometer (A) in the center vent.

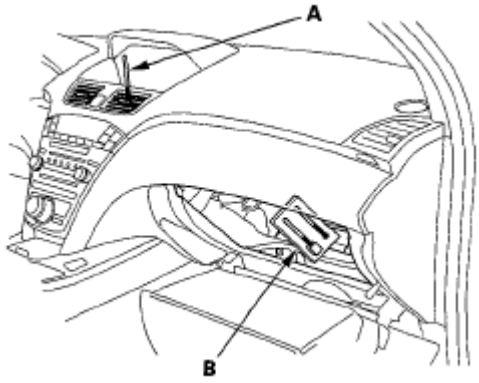


Fig. 228: Identifying Thermometer
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Place a thermometer (B) near the blower unit's recirculation inlet duct.
6. Test conditions:
   - Avoid direct sunlight.
   - Open hood.
   - Open front doors.

- Set the temperature control switch to Max Cool, the mode control switch to Vent, and the recirculation control switch to Recirculate.
- Turn the A/C switch ON and the fan switch to Max.
- Run the engine at 1,500 rpm.
- No driver or passengers in vehicle.

7. After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the center vent, the intake temperature near the blower unit, and the discharge (high) and suction (low) pressures on the A/C gauges.
8. To complete the vent (delivery)/ambient air (intake) temperature chart:
   - Mark the vent (delivery) temperature on the vertical line.
   - Mark the ambient air (intake) temperature on the bottom line.
   - Draw a vertical line from the ambient air (intake) temperature mark.
   - Draw a horizontal line from the vent (delivery) temperature mark until it intersects the vertical line.

NOTE: The vent temperature and ambient air temperature should intersect in the shaded area. Any measurements outside the area may indicate the need for further inspection.

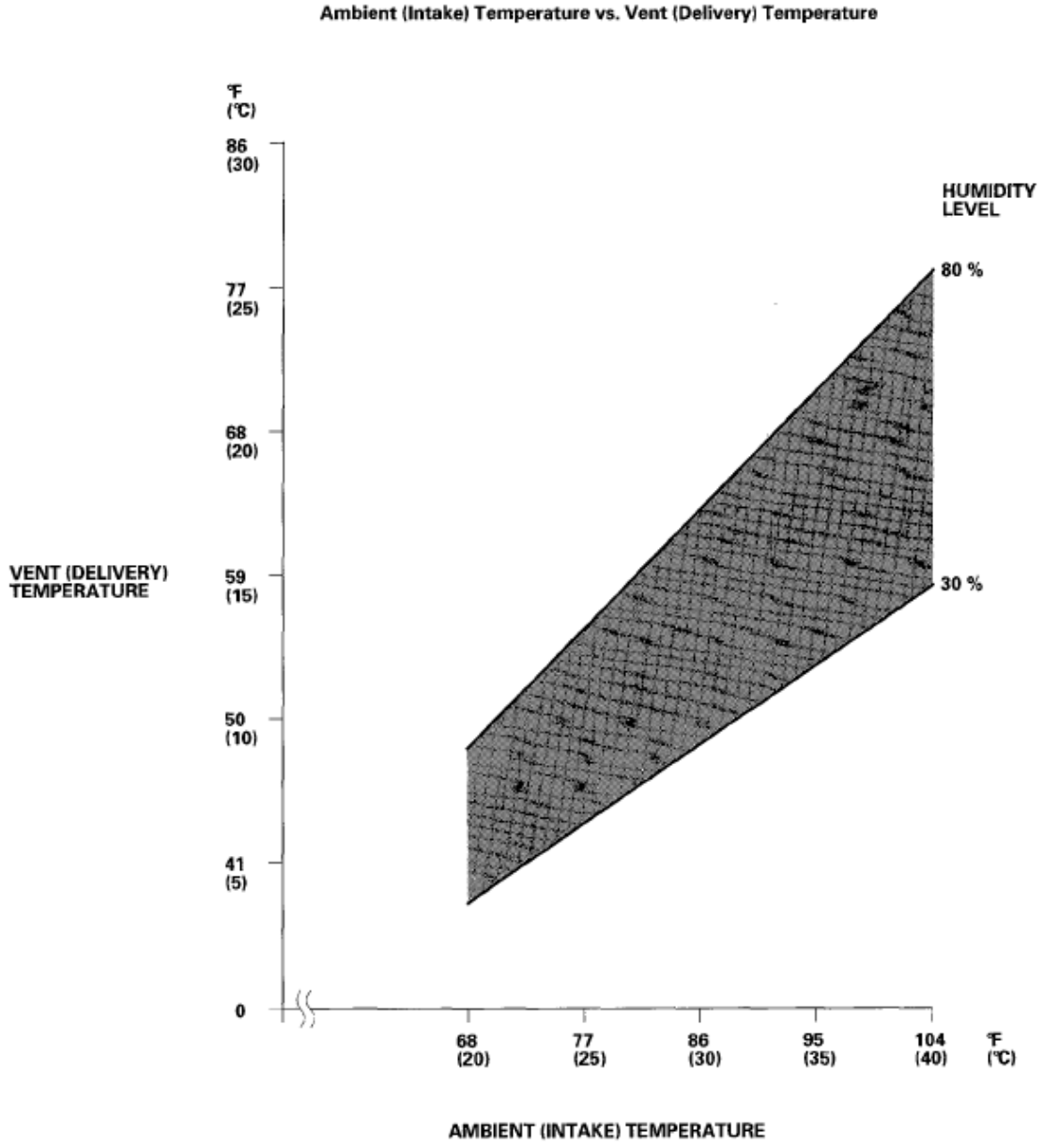


Fig. 229: Ambient (Intake) Temperature Vs Vent (Delivery) Temperature Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. To complete the high side (discharge) pressure/ambient air (intake) temperature chart:
   - Mark the high side (discharge) pressure pressure on the vertical line.
   - Mark the ambient air (intake) temperature on the bottom line.
   - Draw a vertical line from the ambient air (intake) temperature mark.
   - Draw a horizontal line from the high side (discharge) pressure mark until it intersects the vertical line.

NOTE: **The high side pressure and ambient air temperature should intersect in the shaded area. Any measurements outside the area may indicate the need for further inspection.**

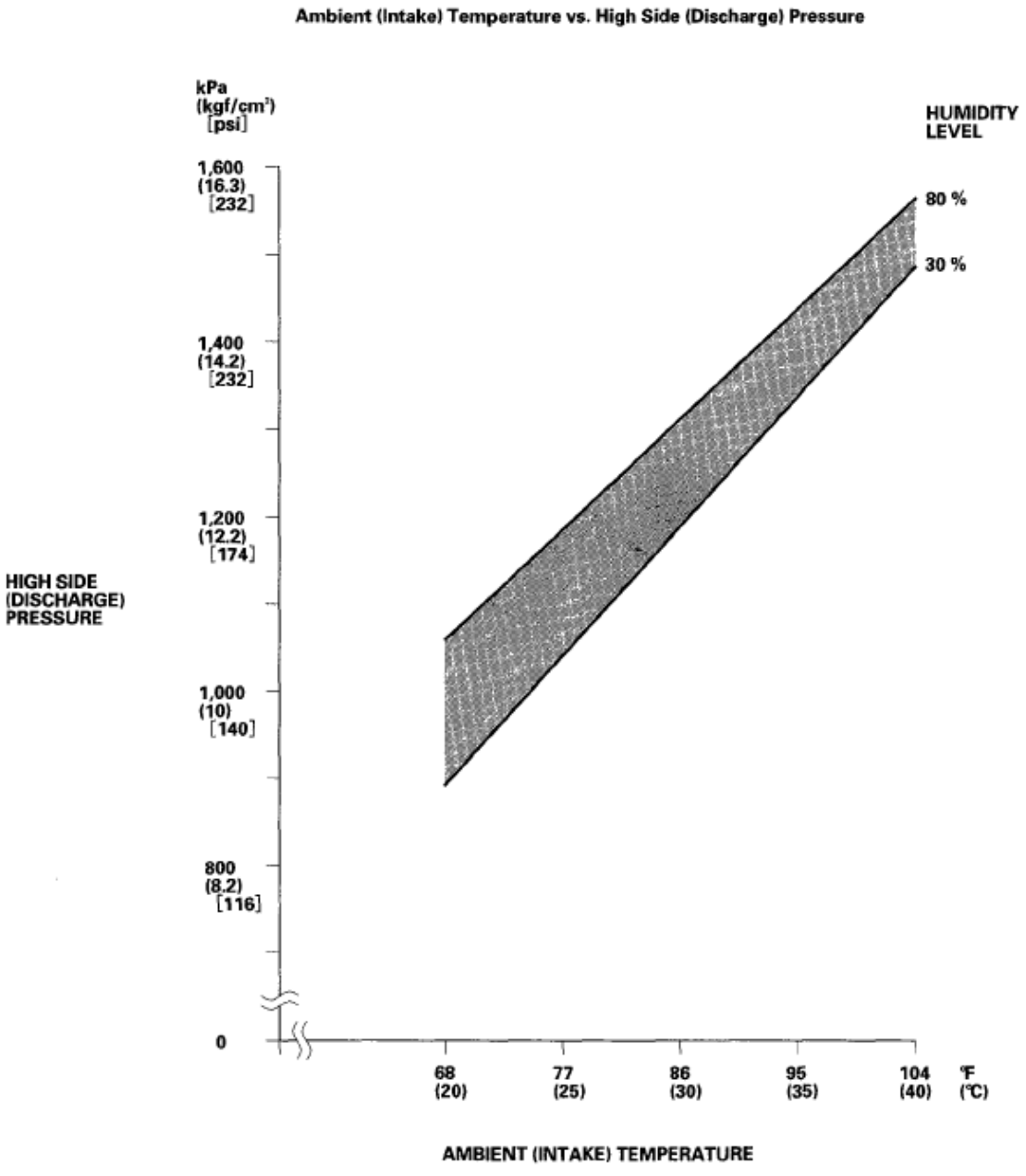


Fig. 230: Ambient (Intake) Temperature Vs High Side (Discharge) Pressure Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. To complete the low side (suction) pressure/ambient air (intake) temperature chart:
    - Mark the low side (suction) pressure along the vertical line.
    - Mark the ambient air (intake) temperature along the bottom line.

- Draw a vertical line from the ambient air (intake) temperature mark.
- Draw a horizontal line from the low side (suction) pressure mark until it intersects the vertical line.

NOTE: The low side pressure and ambient air temperature should intersect in the shaded area. Any measurements outside the area may indicate the need for further inspection.

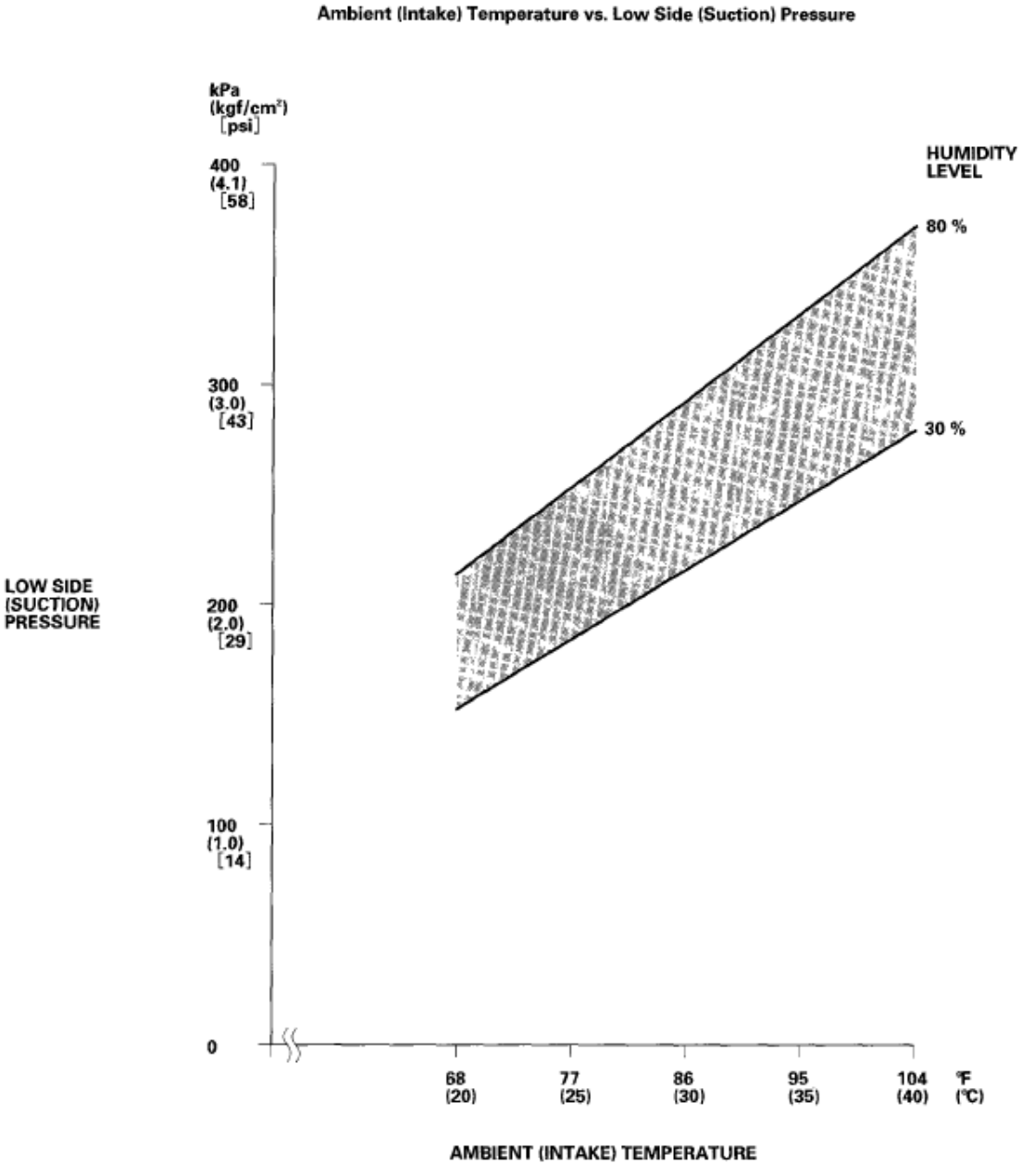


Fig. 231: Ambient (Intake) Temperature Vs Low Side (Suction) Pressure Graph
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PRESSURE TEST

PRESSURE TEST REFERENCE CHART

Test results	Related symptoms	Probable cause	Remedy
Discharge (high) pressure abnormally high	After stopping A/C compressor, pressure drops about 196 kPa (2.0 kgf/cm^2 , 28 psi) quickly, and then falls gradually.	Air in system	Recover, evacuate (see **REFRIGERANT RECOVERY**), and recharge with specified amount (see **SYSTEM CHARGING**).
	Reduced or no airflow through A/C condenser.	• Clogged condenser or radiator fins • A/C condenser or radiator fan not working properly	• Clean. • Check voltage and fan rpm. • Check fan direction.
	Line to A/C condenser is excessively hot.	Restricted flow of refrigerant in system	Restricted lines.
Discharge pressure abnormally low	High and low-pressures are balanced soon after stopping A/C compressor. Low side is higher than normal.	• Faulty A/C compressor discharge valve • Faulty A/C compressor seal	Replace the A/C compressor.
	Outlet of expansion valve is not frosted, low-pressure gauge indicates vacuum.	• Faulty expansion valve • Moisture in system	• Replace. • Recover, evacuate, and recharge with specified amount.
Suction (low) pressure abnormally low	Expansion valve is not frosted, and low-pressure line is not cold. Low-pressure gauge indicates vacuum.	• Frozen expansion valve (Moisture in system) • Faulty expansion valve	• Recover, evacuate, and recharge with specified amount. • Replace the expansion valve.
	Discharge temperature is low, and the airflow from vents is restricted.	Frozen evaporator	Run the fan with A/C compressor off, then check evaporator temperature sensor.
	Expansion valve is frosted.	Clogged expansion valve	Clean or replace.
	Receiver/dryer outlet is cool, and inlet is warm (should be warm during operation).	Clogged receiver/dryer	Replace.
	Low-pressure hose and service port are cooler than	Expansion valve open	Repair or replace.

Suction pressure abnormally high	the temperature around evaporator.	too long	
	Suction pressure is lowered when A/C condenser is cooled by water.	Excessive refrigerant in system	Recover, evacuate, and recharge with specified amount.
	High and low-pressures are equalized as soon as the A/C compressor is stopped, and both gauges fluctuate while running.	• Faulty gasket • Faulty high-pressure valve • Foreign particle stuck in high-pressure valve	Replace the A/C compressor.
Suction and discharge pressures abnormally high	Reduced airflow through A/C condenser.	• Clogged A/C condenser or radiator fins • A/C condenser or radiator fan not working properly	• Clean. • Check voltage and fan rpm. • Check fan direction.
Suction and discharge pressures abnormally low	Low-pressure hose and metal fittings are cooler than evaporator.	Clogged or kinked low-pressure hose parts	Repair or replace.
	Temperature around expansion valve is too low compared with that around receiver/dryer.	Clogged high-pressure line	Repair or replace.
Refrigerant leaks	A/C compressor clutch is dirty.	A/C compressor shaft seal leaking	Replace the A/C compressor.
	A/C compressor bolt(s) are dirty.	Leaking around bolt(s)	Tighten bolt(s) or replace A/C compressor.
	A/C compressor gasket is wet with oil.	Gasket leaking	Replace the A/C compressor.
	A/C fitting is dirty.	Leaking O-ring	Clean the A/C fitting and replace the O-ring.